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of Transportation

**National Highway  
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Bloomington, Indiana 47403-1599

**ON-SITE AIR BAG INVESTIGATION**

CASE NO. - 96-18  
FLEET - PRIVATE VEHICLE  
LOCATION - [REDACTED]  
ACCIDENT DATE - [REDACTED] 1996

Submitted By:

[REDACTED]  
Senior Staff Associate  
and  
[REDACTED]  
Associate Scientist

[REDACTED] 1996

Revised Submission:

[REDACTED] 1998

Contract Number: DTNH22-94-D-17058

Prepared for:

U.S. Department of Transportation  
National Highway Traffic Safety Administration  
National Center for Statistics and Analysis  
Washington, D.C. 20590-0003

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The crash investigation process is an inexact science which requires that physical evidence such as skid marks, vehicular damage measurements, and occupant contact points be coupled with the investigator's expert knowledge and experience of vehicle dynamics and occupant kinematics in order to determine the pre-crash, crash, and post-crash movements of involved vehicles and occupants.

Because each crash is a unique sequence of events, generalized conclusions cannot be made concerning the crashworthiness performance of the involved vehicle(s) or their safety systems.

1. Report No. TRC/IU Case No. 96-18		2. Government Accession No.		3. Recipient's Catalog No.	
4. Title and Subtitle On-Site Air Bag Investigation Private Vehicle Location - [REDACTED]				5. Report Date [REDACTED] 1996; [REDACTED], 1998	
				6. Performing Organization Code	
7. Author(s) [REDACTED] and [REDACTED]				8. Performing Organization Report No. TRC/IU 96-18, Task 0057	
9. Performing Organization Name and Address Indiana University Transportation Research Center [REDACTED] Bloomington, Indiana 47403-1599				10. Work Unit No. (TRAIS)	
				11. Contract or Grant No. DTNH22-94-D-17058	
12. Sponsoring Agency Name and Address U.S. Department of Transportation (NRD-32) National Highway Traffic Safety Administration National Center for Statistics and Analysis Washington, D.C. 20590-0003				13. Type of Report and Period Covered [REDACTED] 1996	
				14. Sponsoring Agency Code	
15. Supplementary Notes On-site air bag deployment investigation involving a 1995 Chevrolet Lumina, four-door sedan, with manual belts and dual front air bags					
16. Abstract This report covers an on-site investigation of an air bag deployment crash that involved a 1995 Chevrolet Lumina, four-door sedan and a 1988 Chevrolet Corsica, four-door sedan. This crash is of special interest because the Lumina's right front child passenger was fatally injured as a result of contacting his deploying air bag. The Lumina was traveling south, straddling the northbound and southbound lanes, on a two-lane, undivided, county road and was entering a 90 degree left-hand curve. The Corsica which was traveling west to northwestward, in a 90 degree right-hand curve, in the northbound lane of the same two-lane, undivided, county road. The crash occurred in the northbound lane, near the middle of the curve, just north of a [REDACTED]. The front right half of the Lumina (case vehicle) impacted the front right half of the Corsica (vehicle #2) causing the case vehicle's driver side and right front passenger side supplemental restraints (air bags) to deploy. The case vehicle's driver (27 year-old female) was normally postured, with her seat track located in its forward-most position, and the tilt steering wheel was located in its middle position. She was not wearing her available, active, three-point, lap and shoulder belt and sustained, according to her interview and her medical records, minor soft tissue injuries to her posterior scalp, abdomen, and upper and lower extremities. The right front passenger in the case vehicle (5 year-old male) was normally postured, with his seat track located between its middle and forward-most positions, and he was not wearing his available, active, three-point, lap and shoulder belt. He sustained, according to the interview with the Lumina's driver (i.e., mother) and his medical records, a fatal atlanto-occipital dislocation from his air bag and was unconscious (Glasgow Coma Scale score = 3) immediately after the crash until his death. In addition, he sustained abrasions from his air bag across his anterior neck and four avulsed upper teeth--possibly from the right front air bag module's cover flap. The right rear passenger (3 year-old male) in the Lumina was normally postured in a child safety seat. The right rear passenger's child safety seat was restrained by his available, active, three-point, lap and shoulder belt. According to the interview with the Lumina's driver (i.e., mother), he did not sustain any injuries as a result of this crash.					
17. Key Words Motor Vehicle Traffic Accident Air Bag Deployment Injury Severity			18. Distribution Statement General Public		
19. Security Classif. (of this report) Unclassified		20. Security Classif. (of this page) Unclassified		21. No. of Pages 97	22. Price \$8,000



## TABLE OF CONTENTS

	<u>Page No.</u>
SUMMARY . . . . .	1
CRASH SCHEMATIC . . . . .	2
ACCIDENT DATA . . . . .	3
AMBIENT CONDITIONS . . . . .	3
ROADWAY . . . . .	3
TRAFFIC CONTROLS . . . . .	4
VEHICLES . . . . .	4
VEHICLE DAMAGE . . . . .	5
EXTERIOR . . . . .	5
Deployment Impact . . . . .	5
INTERIOR . . . . .	6
REPAIR . . . . .	6
VEHICLE VELOCITY ESTIMATES . . . . .	6
COLLISION SEQUENCE . . . . .	7
PRE-CRASH . . . . .	7
CRASH . . . . .	7
POST-CRASH . . . . .	7
Occupants . . . . .	7
Police . . . . .	8
Rescue . . . . .	8
Removal . . . . .	9
HUMAN FACTORS/OCCUPANT DATA . . . . .	9
DRIVERS . . . . .	9
OTHER PASSENGERS . . . . .	9
CASE VEHICLE DRIVER INJURIES . . . . .	10
CASE VEHICLE RIGHT FRONT PASSENGER INJURIES . . . . .	11
CASE VEHICLE RIGHT REAR PASSENGER INJURIES . . . . .	11
VEHICLE #2 DRIVER INJURIES . . . . .	11
CASE VEHICLE DRIVER KINEMATICS . . . . .	12
CASE VEHICLE RIGHT FRONT PASSENGER KINEMATICS . . . . .	12
CASE VEHICLE RIGHT REAR PASSENGER KINEMATICS . . . . .	14
AIR BAG SYSTEM . . . . .	15
DIAGNOSTIC EVALUATION . . . . .	15
Appendix A: Reconstruction Program Results . . . . .	17
SMASH (Damage Only Algorithm -- including Barrier Equivalent Speeds) . . . . .	18
EDCRASH (Damage Only Algorithm) . . . . .	22
TRC Vector Analysis Iterations . . . . .	25
Appendix B: Report of Consultant Engineer . . . . .	29
Appendix C: SELECTED PHOTOGRAPHS: Scene and Vehicles . . . . .	33
Appendix D: SELECTED PHOTOGRAPHS: Case Vehicle's Safety Belts . . . . .	77

# TRC/IU ON-SITE AIR BAG INVESTIGATION

TRC/IU CASE NO. 96-18

FLEET - PRIVATE VEHICLE  
LOCATION - [REDACTED]

## SUMMARY

This report concerns a motor vehicle crash involving an air bag equipped 1995 Chevrolet Lumina, four-door sedan, and a 1988 Chevrolet Corsica, four-door sedan occurring in [REDACTED] 1996 at [REDACTED] p.m., in a rural area, on a county road. This crash is of special interest because the case vehicle's right front child passenger was fatally injured as a result of contacting his deploying air bag.

The Lumina was traveling south, straddling the northbound and southbound lanes, on a two-lane, undivided, county road and was entering a 90 degree left-hand curve when it impacted the Corsica which was traveling west to northwestward, in a 90 degree right-hand curve, in the northbound lane of the same two-lane, undivided, county road. The crash occurred in the northbound lane, near the middle of the curve, just north of a [REDACTED]. The Lumina came to rest approximately one meter (3 feet) north (i.e., backwards) and rotated approximately 20 degrees clockwise after impact and came to rest heading south in the northbound lane of the roadway. The Corsica was pushed south-southeastward (i.e., backwards) approximately 2.4 meters (8 feet) and rotated approximately 10 degrees clockwise after impact and came to rest heading north-northwestward straddling the north and southbound travel lanes.

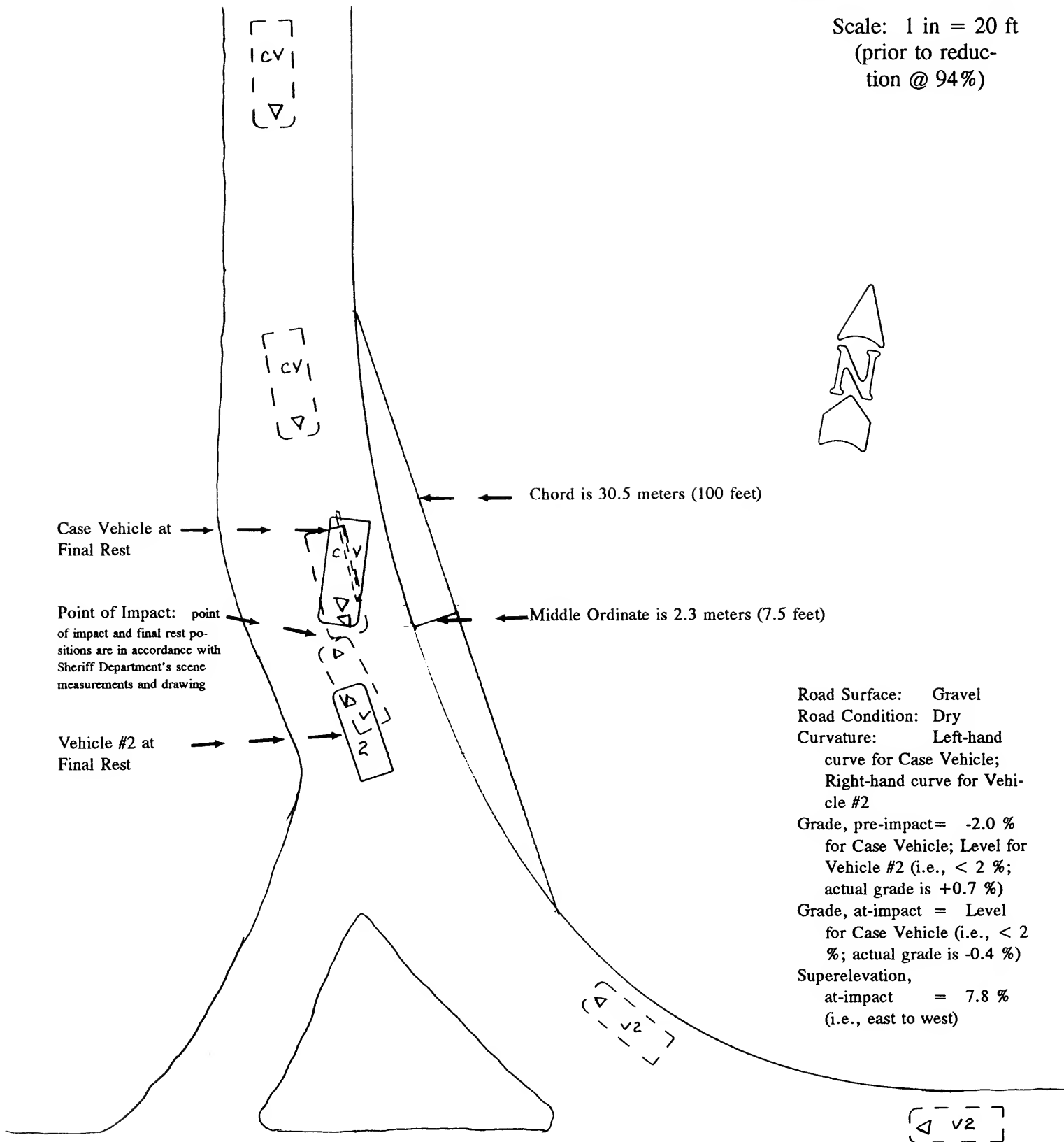
The front right half of the Lumina impacted the front right half of the Corsica. CDCs were determined to be: 12-FZEW-2 for the Lumina and 12-FZEW-2 for the Corsica. The SMASH reconstruction program, damage only algorithm, was used on the highest severity impact to the Lumina. The Total, Longitudinal, and Lateral Delta Vs are respectively: 19 km.p.h. (12 m.p.h.), -18 km.p.h. (-11 m.p.h.), and +3 km.p.h. (+2 m.p.h.). This contractor believes that this Total Delta V is on the low side and should be approximately 29-34 km.p.h. (18-21 m.p.h.).

The 1995 Chevrolet Lumina was equipped with both driver and right front passenger supplemental restraint systems (air bags) which deployed as a result of the frontal impact. The driver of the vehicle (27 year-old female) was normally postured, with her seat track located in its forward-most position, and the tilt steering wheel was located in its middle position. She was not wearing her available, active, three-point, lap and shoulder belt and sustained, according to her interview and her medical records, minor soft tissue injuries to her posterior scalp, abdomen, and upper and lower extremities. The right front passenger (5 year-old male) in the Lumina was normally postured, with his seat track located between its middle and forward-most positions, and he was not wearing his available, active, three-point, lap and shoulder belt. He sustained, according to the interview with the Lumina's driver (i.e., mother) and his medical records, a fatal atlanto-occipital dislocation from his air bag and was unconscious (Glasgow Coma Scale score = 3) immediately after the crash until his death. In addition, he sustained abrasions from his air bag across his anterior neck and four avulsed upper teeth--possibly from the right front air bag module's cover flap. The right rear passenger (3 year-old male) in the Lumina was normally postured in a child safety seat. The right rear passenger's child safety seat was restrained by his available, active, three-point, lap and shoulder belt. According to the interview with the Lumina's driver (i.e., mother), he did not sustain any injuries as a result of this crash. The driver (32 year-old female) of the Corsica was either not wearing or not properly wearing her available, active, three-point, lap and shoulder belt and sustained, according to her interview, moderate injuries which included: distal radius and ulna fractures and multiple soft tissue injuries.

# CRASH SCHEMATIC

TRC/IU CASE NO. 96-18

Scale: 1 in = 20 ft  
(prior to reduction @ 94%)



# TRC/IU ON-SITE AIR BAG INVESTIGATION

TRC/IU CASE NO. 96-18

FLEET - PRIVATE VEHICLE  
LOCATION - [REDACTED]

## ACCIDENT DATA

Location/Street:	County Road
State:	[REDACTED]
Area/Type:	Rural, agricultural
Accident Date/Time:	[REDACTED] 1996, @ [REDACTED] p.m.
Investigating Police Agency:	[REDACTED]
Accident Type:	Car / Car - head-on (offset)
Occupant Injury Severity (air bag vehicle):	Nonanatomic brain injury with coma (AIS-5) from an atlanto-occipital dislocation (AIS-2)

## AMBIENT CONDITIONS

Light Conditions:	Daylight
Weather Condition:	Clear, no clouds
Precipitation:	None
Road Surface:	Dry
Temperature:	Between 73 and 88 degrees F @ applicable city weather station

## ROADWAY

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Location:	County road	County road
Number of Travel Lanes:	Two lanes, undivided	Two lanes, undivided
Width:	3.9 meters (12.7 feet)	3.8 meters (12.6 feet)
Surface Type:	Gravel	Gravel
Median:	None	None
Shoulders:	Unimproved	Unimproved

## ROADWAY (CONTINUED)

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Vertical alignment:	Pre-impact: negative grade (-2.0 %) to south; At-impact: level (i.e., actual grade is -0.4 %)	Pre-impact: level (i.e., actual grade is +0.7 % to northwest); At-impact: level (i.e., actual grade is +0.4 %)
Horizontal alignment:	Curve left	Curve right
Estimated Coefficient of Friction:	.55	.55
Traffic Density:	Light	No other traffic present

## TRAFFIC CONTROLS

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Signals:	None	None
Signs:	Warning CURVE AHEAD sign	None
Markings:	None	None
Speed Limit:	89 km.p.h. (55 m.p.h.)	89 km.p.h. (55 m.p.h.)

## VEHICLES

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Year:	1995	1988
Make:	Chevrolet	Chevrolet
Model:	Lumina	Corsica
Body Type:	Four-door sedan, six-passengers	Four-door sedan, five-passenger
V.I.N.	2G1WL52M3S1-----	1G1LT5116JE-----
Color:	Red	Gray
Mileage:	53,583 km (33,295 miles)	231,940 km (144,121 miles)
Engine:	3.1 liter, V-6	2.0 liter, I-4
Transmission:	Four-Speed automatic	Unknown-speed automatic (125C)

## VEHICLES (CONTINUED)

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Steering:	Power-assisted, rack-and-pinion	Power-assisted, rack-and-pinion
Brakes:	Power-assisted, front disc, rear drum	Power-assisted, front disc, rear drum
Padding:	Steering wheel and hub, sunvisors, dash, "A"-pillars, side door surfaces	Steering wheel, dash, sunvisors, A"-pillars, side door surfaces
Active Restraints:	Three-point, manual, lap and shoulder belts in front and rear outboard seating positions; two-point lap belt in front and rear center seating positions	Three-point, manual, lap and shoulder belts in front and rear outboard seating positions; two-point lap belt in rear center seating position
Passive Restraints:	Factory installed driver and right front passenger supplemental restraint systems (air bags)	None
Defects:	None	None
Fleet:	Private vehicle	Private vehicle
Tow status:	Towed away	Towed away

## VEHICLE DAMAGE

EXTERIOR:Deployment Impact

	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Event number:	First	First
Object Struck:	Vehicle #2	Case Vehicle
Damage location		
Damaged Plane:	Front	Front
Vertical Location		
On Plane:	Bumper	Bumper
Direct Begins:	17 cm ( 6.7 in) left of center to right bumper corner	51 cm ( 20.1 in) over from right bumper corner
Length Direct:	88 cm ( 34.6 in)	51 cm ( 20.1 in)
Field L:	150 cm ( 59.1 in)	136 cm ( 53.5 in)
C <sub>1</sub> :	0 cm ( 0.0 in)	0 cm ( 0.0 in)
C <sub>2</sub> :	1 cm ( 0.4 in)	2 cm ( 0.8 in)

## VEHICLE DAMAGE (CONTINUED)

**EXTERIOR** (Continued)**Case Vehicle****Vehicle #2****Deployment Impact** (Continued)

C <sub>3</sub> :	11 cm ( 4.3 in)	11 cm ( 4.3 in)
C <sub>4</sub> :	20 cm ( 7.9 in)	15 cm ( 5.9 in)
C <sub>5</sub> :	27 cm ( 10.6 in)	24 cm ( 9.4 in)
C <sub>6</sub> :	29 cm ( 11.4 in)	36 cm ( 14.2 in)
D:	+46 cm (+18.1 in)	+42 cm (+16.5 in)
Maximum Crush:	29 cm ( 11.4 in)	36 cm ( 14.2 in)
Location:	C <sub>6</sub>	C <sub>6</sub>
CDC:	12-FZEW-2 (-10)	12-FZEW-2 (+10)
Damaged Components:	Bumper, grille, hood, right headlight assembly, and fender	Bumper, grille, hood, right headlight assembly, and right and left fenders

**INTERIOR**

Damaged Components:	Driver and right front air bag modules, steering wheel, right front sunvis- or and seat, rearview mir- ror, and windshield	Windshield, driver's side
Other Evidence of Occupant Contact:	None	Driver side sunvisor and rearview mirror
Manual Restraint System Failures:	None	None
Seat Performance Failures:	None	None

**REPAIR**

Cost Estimate:	Unknown	Unknown
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VEHICLE VELOCITY ESTIMATES<sup>1</sup>

<b><u>Highest Delta "V"</u></b>	<b><u>Case Vehicle</u></b>	<b><u>Vehicle #2</u></b>
Reconstruction Program:	SMASH and EDCRASH	SMASH and EDCRASH
Program Algorithm:	Damage only	Damage only
Travel Speed:	56 km.p.h. ( 35 m.p.h.)	48 km.p.h. ( 30 m.p.h.)
Total Delta "V":	19 km.p.h. ( 12 m.p.h.)	23 km.p.h. ( 14 m.p.h.)

<sup>1</sup> These speed estimates are based on the vehicle and scene inspections and crash dynamics. For additional discussion, see the page entitled: **TRC VECTOR ANALYSIS ITERATIONS.**

## VEHICLE VELOCITY ESTIMATES (CONTINUED)

<u>Highest Delta "V"</u>	<u>Case Vehicle</u>	<u>Vehicle #2</u>
Longitudinal Delta "V":	-18 km.p.h. (-11 m.p.h.)	-22 km.p.h. (-14 m.p.h.)
Lateral Delta "V":	+3 km.p.h. (+2 m.p.h.)	-4 km.p.h. (-2 m.p.h.)

## COLLISION SEQUENCE

**PRE-CRASH:** According to the Police Accident Report, vehicle #2's driver, and the scene inspection, the case vehicle (Lumina) was traveling south, straddling the northbound and southbound lanes, on a two-lane, undivided, county road and was entering a 90 degree left-hand curve, intending to travel eastbound. According to the Police Accident Report, vehicle #2's driver, and the scene inspection, vehicle #2 was traveling west to northwestward, in a 90 degree right-hand curve, in the northbound lane of the same two-lane, undivided, county road and was intending to continue in her northbound travel. According to the Police Accident Report, the case vehicle's driver, and the scene evidence (see **SELECTED PHOTOGRAPHS #18 and #19**), the driver of the case vehicle braked<sup>2</sup> and steered to her left prior to impact. According to vehicle #2's driver, she steered to her left prior to impact. The crash occurred in the northbound lane, near the middle of the curve<sup>3</sup>, just north of a "Y" ~~intersection~~.

**CRASH:** According to the Police Accident Report, the on-scene police photographs, and the scene inspection, the front right half of the case vehicle impacted the front right half of vehicle #2 causing both the driver and right front passenger side supplemental restraint systems (air bags) to deploy. According to the Police Accident Report and the scene evidence, the case vehicle came to rest approximately one meter (3 feet) north (i.e., backwards) and rotated approximately 20 degrees clockwise after impact and came to rest heading south in the northbound lane of the roadway. Vehicle #2 was pushed south-southeastward (i.e., backwards) approximately 2.4 meters (8 feet) and rotated approximately 10 degrees clockwise after impact and came to rest heading north-northwestward straddling the north and southbound travel lanes.

**POST-CRASH:**

**Occupants:** According to the Police Accident Report and the case vehicle's driver, she remained inside the vehicle at final rest. She was conscious and was able to exit the case vehicle with some assistance. The right front passenger (5 year-old male) remained inside the vehicle at final rest, but he was unconscious and was unable to exit the case vehicle. The right rear passenger in the case vehicle (3 year-old male in a child safety seat) remained in the vehicle at final rest. He was conscious and needed assistance to exit the case vehicle because of his age.

<sup>2</sup> According to the Police Accident Report, the case vehicle deposited 4.0 meters (13.2 feet) of pre-impact skidmarks.

<sup>3</sup> See **SELECTED PHOTOGRAPHS #02 through #05, #09, #11 through #13, and #20**.



## COLLISION SEQUENCE (CONTINUED)

## POST-CRASH: Occupants: (Continued)

According to the Police Accident Report and Vehicle #2's driver, she remained inside the vehicle at final rest, was conscious, and able to exit her vehicle without assistance. According to the Case Vehicle's driver, she was not using her available, active, three-point, lap and shoulder belt<sup>4</sup>. According to the Police Accident Report and the case vehicle's driver, the right rear passenger was properly restrained by his child safety seat with the available, active, three-point lap and shoulder belt. Given that the child safety seat was unavailable during this contractor's inspection of the case vehicle, the properness of the safety belt usage is unknown. The Police Accident Report listed the right front passenger as having an air bag as his restraint. According to the case vehicle's driver, he was wearing his available, active, three-point lap and shoulder belt. Based on this contractor's inspection of the case vehicle and our consultant's analysis of the driver and right front passenger safety belts (see APPENDIX B) and the right front passenger's medical records, he was not restrained. According to the Police Accident Report and the driver of vehicle #2, the vehicle #2's driver was restrained by her available, active, three-point, lap and shoulder belt. According to the vehicle #2's driver, her safety belt became unlatched during the crash. Based on the vehicle inspection, this contractor considers the driver of vehicle #2 as unrestrained.

Police: The [REDACTED] was notified of the accident within three minutes and arrived on-scene within thirteen minutes. Traffic control procedures were established and emergency medical and towing services were called to assist.

Rescue: According to the Police Accident Report, the case vehicle's driver, and the driver's medical records, she was transported by ambulance to a [REDACTED] where she was treated and released. According to the Police Accident Report, the case vehicle's driver, and the right front passenger's medical records, the right front passenger was transported by ambulance to a medical facility where he was subsequently pronounced dead, approximately one and one-half hours post-crash. According to the Police Accident Report and the case vehicle's driver, the right rear passenger was not transported and did not require medical treatment. According to the Police Accident Report and vehicle #2's driver, she was transported by ambulance to a [REDACTED] where she was treated and released. According to the case vehicle's driver and her medical records, the driver sustained minor soft tissue injuries to her posterior scalp, abdomen, and upper and lower extremities. According to the right front passenger's medical records, the front right passenger sustained an atlanto-occipital dislocation and was unconscious (Glasgow Coma Scale score = 3) immediately after the crash until his death. According to the case vehicle's driver, the right rear passenger was not injured. According to vehicle #2's driver, she sustained distal radius and ulna fractures and multiple soft tissue injuries.

<sup>4</sup> According to the Police Accident Report, the case vehicle's driver was using her available, active, three-point, lap and shoulder belt.

## COLLISION SEQUENCE (CONTINUED)

## POST-CRASH: (Continued)

Removal: Following the police investigation, case vehicle and vehicle #2 were both towed from the scene.

## HUMAN FACTORS/OCCUPANT DATA

<b><u>DRIVERS:</u></b>	<b><u>Case Vehicle</u></b>	<b><u>Vehicle #2</u></b>
Age:	27 year-old	32 year-old
Sex:	Female	Female
Height:	160 cm (63 in)	160 cm (63 in)
Weight:	86 kg (190 lbs)	68 kg (150 lbs)
Occupation:	Homemaker	Laborer
Active Restraint System/Usage:	Three-point lap and shoulder belt/Not used	Three-point lap and shoulder belt/Not used
Usage Source:	Vehicle inspection and interviewee	Vehicle inspection
Passive Restraint System/Usage:	Factory installed air bag/air bag deployed	Not equipped
Usage Source:	Vehicle inspection and interviewee	Not Applicable
Eye glasses/contacts:	None	Not Applicable
Vehicle Familiarity:	One month @ 26,554 km (16,500 mi) per year	Two years @ 35,406 km (22,000 mi) per year
Route Familiarity:	Daily	Daily per interview, infrequent per Police Accident Report
Trip Plan:	Home to recreation (i.e., swimming pool)	Work to social (i.e., picking up son)
Manner of Leaving Scene:	Ambulance	Ambulance
Type of Medical Treatment:	Treated and released	Treated and released
<b><u>OTHER PASSENGERS:</u></b>	<b><u>Case Vehicle: Right Front Passenger</u></b>	<b><u>Case Vehicle: Right Rear Passenger</u></b>
Age:	5 year-old	3 year-old
Sex:	Male	Male

## HUMAN FACTORS/OCCUPANT DATA (CONTINUED)

<b>OTHER PASSENGERS:</b> <u>(Continued)</u>	<b>Case Vehicle:</b> <b><u>Right Front Passenger</u></b>	<b>Case Vehicle:</b> <b><u>Right Rear Passenger</u></b>
Height:	Unknown	91 cm (36 in)
Weight:	19 kg (42 lbs)	15 kg (32 lbs)
Active Restraint System/Usage:	Three-point lap and shoulder belt/Not used	Three-point lap and shoulder belt with child safety seat/Used properly
Usage Source:	Vehicle inspection	Interviewee and Police Accident Report
Passive Restraint System/Usage:	Factory installed air bag/air bag deployed	Not equipped
Usage Source:	Vehicle inspection, interviewee, and Police Accident Report	Not applicable
Eyeglasses/contacts:	None	Not applicable
Manner of Leaving Scene:	Ambulance	Went with dad
Type of Medical Treatment:	Died in ER	None

## CASE VEHICLE DRIVER INJURIES

<b><u>Description of Injury</u></b>	<b><u>A.I.S.</u></b>	<b><u>Source of Data</u></b>	<b><u>Injury Mechanism</u></b>	<b><u>Certainty</u></b>
Contusion occipital scalp	190402.1,6	6	Seat back support	{Possible}
Contusion abdomen	590402.1,4	7	Steering wheel rim	{Probable}
Contusion right forearm	790402.1,1	7	Air bag, driver's side	{Probable}
Contusion right hip	890402.1,1	7	Center armrest	{Possible}
Contusion left knee	890402.1,2	7	Left dash below instrument panel	{Probable}
Contusion right knee	890402.1,1	7	Steering column	{Probable}

CASE VEHICLE RIGHT FRONT PASSENGER INJURIES<sup>5,6,7</sup>

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Nonanatomic brain injury <sup>5</sup> , unresponsive (GCS=3)	160824.5,0	3	Air bag, passenger's side	{Certain}
Atlanto-occipital dislocation with probable transverse ligament rupture	650208.2,6	3	Air bag, passenger's side	{Certain}
Abrasions neck, completely across <sup>6</sup>	390202.1,4	3	Air bag, passenger's side	{Certain}
Avulsed teeth (4)	251406.1,8	8 <sup>7</sup>	Air bag compartment cover, passenger's side	{Possible}

## CASE VEHICLE RIGHT REAR PASSENGER INJURIES

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Not injured	0	7	Not applicable	Not applicable

## VEHICLE #2 DRIVER INJURIES

<u>Description of Injury</u>	<u>A.I.S.</u>	<u>Source of Data</u>	<u>Injury Mechanism</u>	<u>Certainty</u>
Fracture left distal radius	752800.2,2	7	Steering wheel rim	{Probable}
Fracture left distal ulna	753200.2,2	7	Steering wheel rim	{Probable}
Laceration lower lip	290600.1,8	7	Windshield	{Probable}
Contusion under left breast	490402.1,2	7	Steering wheel rim	{Probable}
Contusion right forearm	790402.1,1	7	Center dash	{Possible}
Contusion left knee	890402.1,2	7	Left lower dash	{Certain}

<sup>5</sup> According to the Emergency Room report, at the time of arrival in the emergency room the patient's pupils were fixed and dilated, and there was no heart-beat or respirations. In addition, there was no response neurologically.

<sup>6</sup> According to the emergency room physician, there was obvious (not further specified) trauma to the occupant's neck. According to the case vehicle's driver, there were abrasions from side-to-side across the entire anterior portion. According to the mortician who served the occupant's family, the neck abrasions were primarily from the Adam's apple to the right ear. In addition, the mortician noted that all of the facial trauma was below the occupant's nose (i.e., there was no trauma from the nose upwards)

<sup>7</sup> Four upper teeth were reported as dislocated (i.e., "knocked out") by the family's mortician; the occupant's lower teeth were okay.

**CASE VEHICLE DRIVER KINEMATICS**

According to the case vehicle's driver, immediately prior to the crash she was normally postured [i.e., sitting slightly reclined with her back against the seatback, her left foot on the floor, her right foot on the brake, and both hands on the steering wheel--at the 7 and 1 o'clock positions (i.e., steering to the left)]. According to the case vehicle's driver, her seat track was located in its forward-most position and the tilt steering wheel was located in its middle position. According to the vehicle inspection, the driver's seatback was found in the slightly reclined position, her seat track was in its forward-most position, and the tilt steering wheel was found in its up-most position. According to the vehicle inspection and driver's interview, she was not wearing her available, active, three-point, lap and shoulder belt.

According to the Police Accident Report, the scene evidence, and the interview with the case vehicle's driver, she steered to the left and braked--depositing 4.0 meters (13.2 feet) of skid-marks, attempting to avoid the crash. As a result of these attempted avoidance maneuvers and the nonuse of her available safety belts, she most likely moved slightly forward and to her right just prior to impact.

Based on the vehicle and scene inspections and occupant kinematic principles (i.e., PDOF -10 degrees), the case vehicle's primary impact with vehicle #2, not only deployed the driver's side air bag, but thrust the driver forward and slightly leftward contacting the deploying air bag with her face and right forearm. An inspection of the driver's air bag revealed evidence of contact to the upper left side (towards the 12 o'clock PDOF); see **SELECTED PHOTOGRAPHS #41** through **#44**. In addition, the upper portion of the steering wheel rim is bent backwards (i.e., toward the instrument panel; see **SELECTED PHOTOGRAPHS #43**) as a result of the air bag being forced to expand backwards toward the rim because of the driver-air bag interaction. The vehicle inspection revealed no contact evidence on the driver side air bag module's cover flap. It should be noted that neither the case vehicle's driver nor her medical records indicated any facial injury as a result of her head impacting the air bag.

Because of the driver's stature<sup>8</sup> and her nonuse of the available safety belts, she most likely submarined enough to cause her to contact her left knee on the knee bolster, her right knee on the underside of the steering column, and the bottom rim with her abdomen, all of which she indicated were contused. In addition, it is possible this contact with the steering wheel rim caused the tilt wheel to shift upward were it was found at the time of the vehicle inspection.

The air bag impact to the driver's upper torso and face most likely knocked the case vehicle's driver backwards into her seat where she possible sustained the occipital scalp contusion. In addition, as the case vehicle rotated clockwise post-impact, the driver may have contused her right hip by contacting the center armrest. According to the case vehicle's driver, at final rest she was essentially in her original seating position.

**CASE VEHICLE RIGHT FRONT PASSENGER KINEMATICS**

According to the case vehicle's driver (i.e., mother), she was uncertain of the right front passenger's posture immediately prior to the crash but thought he was normally postured

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<sup>8</sup> Height: 160 centimeters (63 inches); Weight: 86 kilograms (190 pounds)

## CASE VEHICLE RIGHT FRONT PASSENGER KINEMATICS (CONTINUED)

(i.e., sitting slightly reclined with his back against the seatback, both feet hanging down over the edge of the seat, and both hands in his lap). According to the case vehicle's driver and the vehicle inspection, the right front passenger's seat track was located between its middle and forward-most positions. According to the vehicle inspection, the driver's seatback was located in the slightly reclined position. The case vehicle's driver believes the right front passenger (i.e., her son) was properly restrained, but the lack of usage evidence on the occupant's safety belt system<sup>9</sup>, together with the more reliable evidence (i.e., contacted cover flap, injury pattern, and police witness statements) suggests otherwise. The Police Accident Report did not indicate belt usage; instead, it only mentions the fact that this occupant's air bag deployed. It should be noted that an inspection of this occupant's belt system was made by an independent expert (see **APPENDIX B**), and the inspection showed no conclusive evidence of usage.

As a result of the case vehicle's attempted avoidance maneuvers (i.e., braking and steering left) and the nonuse of his available safety belts, the right front passenger most likely moved slightly forward and to his right just prior to impact.

Based on the vehicle and scene inspections and occupant kinematic principles (i.e., PDOF -10 degrees), the case vehicle's primary impact with vehicle #2, not only deployed the right front passenger side air bag, but thrust the right front passenger (5 year-old male) forward and slight leftward contacting the deploying air bag with his lower face (e.g., mouth and/or chin) and neck. An inspection of the right front passenger's air bag revealed skin and oil transfers; see **SELECTED PHOTOGRAPHS #46 through #49**. In addition, there appears to be a skin transfer to the leading edge of the right front air bag module's cover flap; see **SELECTED PHOTOGRAPHS #55 through #58**. In this contractor's opinion, the mouth of the unrestrained, right front occupant was over the leading edge of the module's cover flap when the air bag started to deploy<sup>10</sup>. This scenario would help to explain how this occupant had his four top teeth avulsed, as indicated by the mortuary director<sup>11</sup>. In addition, this would also explain why the mortuary director remarked that there were no soft tissue injuries above his nose<sup>12</sup>. One possible reason for there being no teeth marks on the cover flap is that this occupant's teeth were most likely near the point of coming out in order to be replaced by the adult teeth.

Based on the contact evidence (skin and oil) found on the upper left side of the air bag, as the air bag began to unfold it impact this occupant under the chin, knocking him upwards and back against his seatback. The contact to the occupant's chin/neck certainly caused the fatal lesions [i.e., an atlanto-occipital dislocation and unconsciousness (Glasgow Coma Scale score = 3) immediately after the crash until his death].

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<sup>9</sup> Appendix D presents a detailed photographic examination of both the driver's and right front passenger's safety belts. There is no good evidence that the right front passenger's safety belt was in use at the time of the crash.

<sup>10</sup> The available physical evidence almost certainly indicates that there was a substantial interaction between the right front air bag module's cover flap and the child because the cover flap was depress (see **SELECTED PHOTOGRAPHS #57 and #62**) and cracked (see **SELECTED PHOTOGRAPHS #59 and #60**).

<sup>11</sup> The right front passenger's medical records neither support nor deny the mortuary director's statement.

<sup>12</sup> It must be noted that the occupant's medical records provide no detail pertaining to his soft tissue injuries other than the generalized statement: "obvious trauma to the neck on gross examination."

**CASE VEHICLE RIGHT FRONT PASSENGER KINEMATICS (CONTINUED)**

According to the case vehicle's driver (i.e., mother) and the evidence (i.e., blood; see **SELECTED PHOTOGRAPHS #37 through #39**) in the case vehicle, at final rest the boy was laying to his left with his head hanging over the center arm rest. According to the case vehicle's driver, immediately following the accident and after realizing her son was badly injured, she pulled him out of the vehicle and placed him on the grass at the edge of the roadway. According to our interview with the case vehicle's driver, when repeatedly questioned about how her son was positioned following the crash and how she removed him from the case Vehicle, she indicated that she did not recall how he was positioned and stated that she just picked him up. The case vehicle's driver never mentioned having to unlatch or remove the seatbelt from her son. In addition, it should also be noted that, according to an emergency medical technician who was present at the scene and who ask the case vehicle's driver if her son was belted, the case vehicle's driver stated that her son should have been belted.

**CASE VEHICLE RIGHT REAR PASSENGER KINEMATICS**

According to the case vehicle's driver (i.e., mother), immediately prior to the crash the right rear passenger was normally postured (i.e., seated upright in his [REDACTED] child safety seat with his back against the seatback, his feet hanging down over the seat's edge, and both his hands on his lap. According to the case vehicle's driver and the vehicle inspection, the rear bench seat was not adjustable. According to the Police Accident Report and the interview with the case vehicle's driver, he was also restrained<sup>13</sup> by his available, active, three-point, lap and shoulder belt which was attached to the safety seat.

As a result of the case vehicle's attempted avoidance maneuvers (i.e., braking and steering left) and the use of his available safety devices, the right rear passenger most likely moved slightly forward toward his safety seat harness just prior to impact.

Based on the vehicle and scene inspections and occupant kinematic principles, the case vehicle's primary impact with vehicle #2, not only deployed the case vehicle's air bags, but thrust the right rear passenger forward and slightly to his left. Because he was restrained, the seatbelt and child safety seat harness was loaded and prevented him from being thrown forward into the seatback. An inspection of the seatbelt (i.e. webbing and latch plate) showed no conclusive evidence of usage. This result occurred not only because of his lack of body weight but also because the majority of the decelerative forces were absorbed prior to reaching his rear seat position.

The right rear passenger most likely moved toward his right (as a result of the post-crash clockwise rotation) and backwards into his child safety seat. According to the case vehicle's driver, the right rear passenger was removed with some assistance, but it is unclear who removed the child. The indicated child safety seat usage most likely prevented this occupant from sustaining any reported injuries.

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<sup>13</sup> Because the child safety seat was not available during this contractor's vehicle inspection, the properness of the reported usage is unknown.

AIR BAG SYSTEM<sup>14</sup>

	<u>DRIVER AIR BAG</u>	<u>PASSENGER AIR BAG</u>
Air Bag Diameter (seam-to-seam, deflated):	Width: 63 cm (24.8 in) Height: 65 cm (25.6 in)	Width: 66 cm (26.0 in) Height: 50 cm (19.7 in)
Number of Vent Holes:	Two	Two
Vent Hole Diameter:	3.0 cm (1.2 in)	3.0 cm (1.2 in)
Vent Hole Clock Positions:	Approximately 3 and 9 o'clock	Approximately 2 and 10 o'clock
Number of Air Bag Tethers:	None	One, 7.5 cm (3.0 in) wide
Number of Air Bag Module Cover Flaps:	Two	One
Left <sup>14</sup> /Upper Cover Flap Dimensions:	Width: 7.6 cm (3.0 in) Height: 11.4 cm (4.5 in)	Width: 39 cm (15.4 in) Side Height: Left - 27 cm (10.6 in) Right - 23 cm (9.1 in)
Right Cover Flap Dimensions:	Width: 7.6 cm (3.0 in) Height: 11.4 cm (4.5 in)	Not applicable
Distance between Dash and leading (i.e., closest) edge of Module's Cover Flap:	Not applicable	1.0 cm (0.4 in)
Generant Residue:	No unusual amount found	No unusual amount found

DIAGNOSTIC EVALUATION:

During this investigation, this contractor was contacted by two people from [REDACTED] one was with [REDACTED] NAO Safety and Restraints Center and the other with Product Analysis. According to these two [REDACTED] analysis, a [REDACTED] technician familiar with obtaining and deciphering stored information in [REDACTED] vehicle's equipped with either a DERM (Diagnostic Energy Reserve Module) or SDM ([REDACTED]) retrieved this information from the case vehicle a few weeks after this contractor's post-vehicle inspection. According to the technician, the case vehicle was equipped with an SDM.

According to these [REDACTED] analysis, the SDM is able to take a snap shot of any near deployment events the case vehicle has incurred throughout its driving lifetime. These near deployment events would include anything from a 8 km.p.h. (5 m.p.h.) fender bender to an impact just

<sup>14</sup> The driver side air bag module's left cover flap did not completely tear open.



## AIR BAG SYSTEM (CONTINUED)

**DIAGNOSTIC EVALUATION:** (Continued)

below the vehicle's threshold or higher--the latter causing deployment. Essentially the snapshot is taken at any deceleration event incurred by the case vehicle higher than "2g"s {i.e., two times the speed of gravity [9.8 meters/second/second (32 feet/second/second)]}. The SDM also is capable of recording the driver's seatbelt status at the last recorded event, any recorded air bag warnings that were detected (pre- or post-crash), and the time the warnings first appeared. Another important bit of information the SDM is capable of retaining is the maximum Delta V the case vehicle sustained during its deployment event (crash). The SDM also provides numerous bits of information that neither has meaning nor is of any use to this investigation.

In summary, the case vehicle's SDM revealed the following for this crash:

- o the crash occurred during ignition cycle 3790;
- o there were no malfunctions of the air bag (i.e., threshold was met);
- o no warning codes were stored prior to the crash;
- o warning codes stored on SDM post-crash are all associated with the crash;
- o the driver's three-point belt was not fastened at the time of the crash;
- o the case vehicle's maximum Delta V was 39 km.p.h. (24 m.p.h.) and reached peak at 150 milliseconds into the crash; and
- o the case vehicle achieved the deployment threshold 33.75 milliseconds into crash.

NOTE: This contractor believes the Delta V recorded by the case vehicle's SDM is on the high side but closer to the actual Delta V than what was indicated by the SMASH reconstruction program, damage only algorithm.

**Appendix A:**

**RECONSTRUCTION PROGRAM RESULTS:**

**SMASH  
(DAMAGE ONLY ALGORITHM)**

**EDCRASH  
(DAMAGE ONLY ALGORITHM)**

**TRC VECTOR ANALYSIS ITERATIONS**

**SMASH**  
**(DAMAGE ONLY ALGORITHM**  
**-- INCLUDING**  
**BARRIER EQUIVALENT SPEEDS)**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## SMASH PROGRAM SUMMARY

(All Measurements in Metric)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

### Identifying Title

10

Primary  
Sampling Unit

9618

Case No.-Stratum

01

Accident Event  
Sequence No.

1 1 1

Date (Month, day, year) of Run

### GENERAL INFORMATION

#### VEHICLE 1

NASS Vehicle Number

Year

Make

Model

Body Style

CDC

PDOF

Heading Angle

1995

Chevrolet

Lumina

45

12 FZ EW2

10°

155°

#### VEHICLE 2

NASS Vehicle Number

Year

Make

Model

Body Style

CDC

PDOF

Heading Angle

1988

Chevrolet

Corsica

45

12 FZ EW2

10°

40°

### VEHICLE SPECIFICATIONS

#### VEHICLE 1

Wheelbase

Overall Length

Overall Width

Weight

1510 + 120 + 2 = 1632 kg

Curb Occupant(s) Cargo

Engine Displacement

Drive System

Size

Stiffness

273 cm

510 cm

184 cm

3.1 L  
FWD

3

9

#### VEHICLE 2

Wheelbase

Overall Length

Overall Width

Weight

1270 + 68 + 5 = 1343 kg

Curb Occupant(s) Cargo

Engine Displacement

Drive System

Size

Stiffness

263 cm

466 cm

173 cm

2.0 L  
FWD

3

9

### DAMAGE INFORMATION

#### VEHICLE 1

Damage Known?

Damage Length

Damage Offset

Crush Depth:

C1 0 cm

C2 1 cm

C3 11 cm

C4 20 cm

C5 27 cm

C6 29 cm

150 cm

46 cm

#### VEHICLE 2

Damage Known?

Damage Length

Damage Offset

Crush Depth:

C1 0 cm

C2 2 cm

C3 11 cm

C4 15 cm

C5 27 cm

C6 36 cm

136 cm

42 cm

## National Accident Sampling System-Crashworthiness Data System: SMASH Program Summary

## SCENE INFORMATION

Rest and Impact Positions ☐ No ☐ Yes

## VEHICLE 1

## VEHICLE 2

Rest X . . . m

Rest X . . . m

Position Y . . . m

Position Y . . . m

Heading Angle . . . °

Heading Angle . . . °

Impact X . . . m

Impact X . . . m

Position Y . . . m

Position Y . . . m

Heading Angle . . . °

Heading Angle . . . °

Slip Angle (-180 to +180) . . . °

Slip Angle (-180 to +180) . . . °

## VEHICLE MOTION

Sustained Contact ☐ No ☐ YesSustained Contact ☐ No ☐ Yes

## VEHICLE 1

## VEHICLE 2

Vehicle Rotation ☐ No ☐ YesVehicle Rotation ☐ No ☐ YesRotation Stop Before Rest ☐ No ☐ YesRotation Stop Before Rest ☐ No ☐ Yes

End of Rotation X . . . m

End of Rotation X . . . m

Position Y . . . m

Position Y . . . m

Heading Angle . . . °

Heading Angle . . . °

Curved Path ☐ No ☐ YesCurved Path ☐ No ☐ Yes

Point on Path

X . . . m Y . . . m

Point on Path

X . . . m Y . . . m

Rotation Direction ☐ None ☐ CW ☐ CCWRotation Direction ☐ None ☐ CW ☐ CCWRotation > 360° ☐ No ☐ YesRotation > 360° ☐ No ☐ Yes

## FRICTION INFORMATION

Coefficient of Friction . . .

Rolling Resistance Option 1

## Vehicle 1 Rolling Resistance

## Vehicle 2 Rolling Resistance

LF . . .

LF . . .

RF . . .

RF . . .

LR . . .

LR . . .

RR . . .

RR . . .

IF THIS COMMON IMPACT WAS WITH A CDS VEHICLE NOT IN TRANSPORT, FILL IN THE INFORMATION BELOW.

Model Year: \_\_\_\_\_

The Weight, CDC, Scene Data and Damage Information for this vehicle should be recorded above.

Make: \_\_\_\_\_

Model: \_\_\_\_\_

VIN: \_\_\_\_\_

Complete and ATTACH the appropriate  
damage sketch and dimensions to the form.

# Summary of Results Using Damage

Special Crash Investigation, TRC/IU 96-18, Task 0057

## Speed Change (Damage)

### Vehicle #1

Total 19 km/h ( 12 mph)  
 Longitudinal -18 km/h ( -11 mph)  
 Latitudinal 3 km/h ( 2 mph)  
 PDOF Angle -10 ½  
 Energy Dissipated = 31778 Joules ( 23435 Ft-Lb)  
 Barrier Equivalent Speed = 18.0 km/h ( 11.2 mph)  
 Calculated using crush coefficients entered by the user.

### Vehicle #2

Total 23 km/h ( 14 mph)  
 Longitudinal -22 km/h ( -14 mph)  
 Latitudinal -4 km/h ( -2 mph)  
 PDOF Angle 10 ½  
 Energy Dissipated = 30781 Joules ( 22700 Ft-Lb)  
 Barrier Equivalent Speed = 23.7 km/h ( 14.7 mph)  
 Calculated using crush coefficients found in the vehicle database.

## General Information

	Vehicle #1 áááááááááá	Vehicle #2 áááááááááá
Year	1995	1988
Make	Chevrolet	Chevrolet
Model	Lumina	Corsica
CDC	12FZEW2	12FZEW2
Side Damaged	F	F
PODF Angle	-10 ½	10 ½
Heading Angle	155 ½	-40 ½

Calculation method:	Vehicle's Crush Coeff.	Calculated Crush Coeff.
d0 crush coeff.	99.19 sqrt(N)	111.30 sqrt(N)
d1 crush coeff.	6.47 sqrt(N)/cm	6.47 sqrt(N)/cm

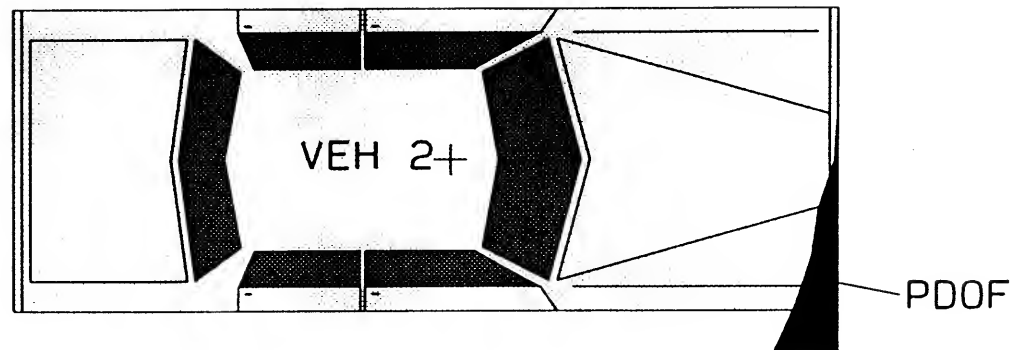
### Damage Information

	Vehicle #1		Vehicle #2	
	áááááááááá		áááááááááá	
Vehicle Damage Known	Yes		Yes	
Crush Length	150.0	cm ( 59 in)	136.0	cm ( 54 in)
C1	0.0	cm ( 0 in)	0.0	cm ( 0 in)
C2	1.0	cm ( 0 in)	2.0	cm ( 1 in)
C3	11.0	cm ( 4 in)	11.0	cm ( 4 in)
C4	20.0	cm ( 8 in)	15.0	cm ( 6 in)
C5	27.0	cm ( 11 in)	24.0	cm ( 9 in)
C6	29.0	cm ( 11 in)	36.0	cm ( 14 in)
D	46.0	cm ( 18 in)	42.0	cm ( 17 in)
D'	76.6	cm ( 30 in)	70.8	cm ( 28 in)

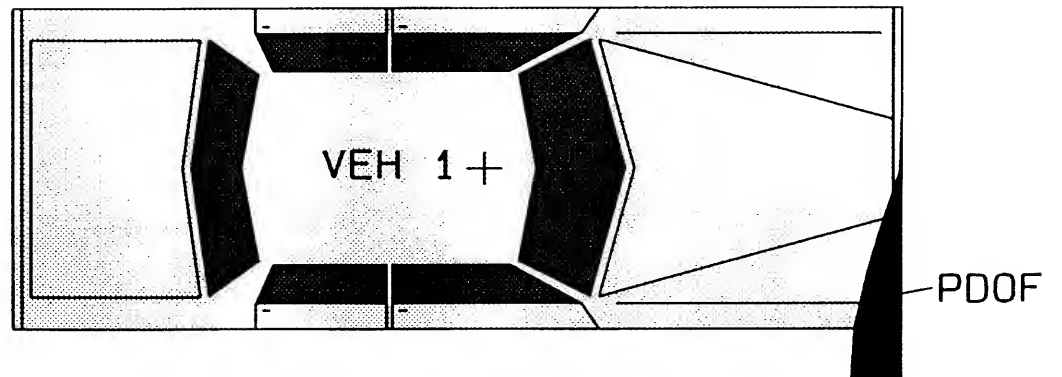
### Vehicle Dimensions

	Vehicle #1		Vehicle #2	
	áááááááááá		áááááááááá	
Length	510.0	cm ( 201 in)	466.0	cm ( 183 in)
Width	184.0	cm ( 72 in)	173.0	cm ( 68 in)
Wheelbase	273.0	cm ( 107 in)	263.0	cm ( 104 in)
Weight	1632	kgs ( 3598 lbs)	1343	kgs ( 2961 lbs)
CG to Front of Veh	228.1	cm ( 90 in)	228.1	cm ( 90 in)
Engine Displacement	3.1 liters		2.0 liters	
Moment of Inertia	383494	kgs ( 33944 lbs)	263479	kgs ( 23321 lbs)
Vehicle Mass	1632	kgs ( 9.4 lb-s^2/in)	1343	kgs ( 7.7 lb-s^2/in)

1988 Chevrolet Corsica



1995 Chevrolet Lumina





**EDCRASH**  
**(DAMAGE ONLY ALGORITHM)**

SUMMARY OF EDCRASH RESULTS

Lic. User: NHTSA #8      S/N: 0266-8      Version: 4.61

Date: [REDACTED] 1996

[REDACTED], TRC/IU 96-18, Task 0057

MESSAGES:

NO MESSAGES

VEHICLE # 1

IMPACT SPEED km/h		SPEED CHANGE km/h			BASIS FOR RESULTS
FWD	LAT	TOTAL	LONG.	LATERAL	
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND CONSERVATION OF LINEAR MOMENTUM
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND DAMAGE
		18.8	-18.6	3.3	DAMAGE DATA ONLY

VEHICLE # 2

IMPACT SPEED km/h		SPEED CHANGE km/h			BASIS FOR RESULTS
FWD	LAT	TOTAL	LONG.	LATERAL	
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND CONSERVATION OF LINEAR MOMENTUM
N/A	N/A	N/A	N/A	N/A	SPINOUT TRAJECTORIES AND DAMAGE
		22.9	-22.5	-4.0	DAMAGE DATA ONLY

SUMMARY OF DAMAGE DATA  
(NOTE: '\*\*' indicates default value)

	Vehicle #1	Vehicle #2
CLASS / STIFFNESS CATEGORIES	3 / 9	3 / 9
WEIGHT	1632.0 kg	1343.0 kg
CDC	12FZEW2	12FZEW2
DAMAGE WIDTH	150.0 cm	136.0 cm
CRUSH DEPTH 1	0.0 cm	0.0 cm
CRUSH DEPTH 2	1.0 cm	2.0 cm
CRUSH DEPTH 3	11.0 cm	11.0 cm
CRUSH DEPTH 4	20.0 cm	15.0 cm
CRUSH DEPTH 5	27.0 cm	24.0 cm
CRUSH DEPTH 6	29.0 cm	36.0 cm
DAMAGE MIDPOINT OFFSET	46.0 cm	42.0 cm
DAMAGE ENERGY	34146.9 Joules	29907.4 Joules
MAGNITUDE OF PRINCIPAL FORCE	157778.8 N	140540.4 N
DIRECTION OF PRINCIPAL FORCE	-10.0 deg	10.0 deg
MOMENT ARM OF PRINCIPAL FORCE	113.1 cm	32.0 cm
DAMAGE CENTROID	76.6 cm	70.8 cm

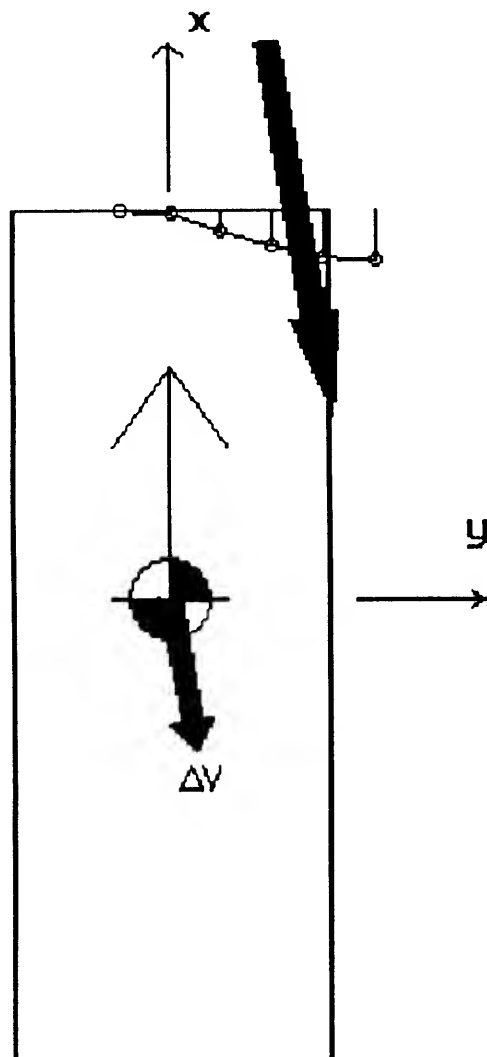
DIMENSIONAL, INERTIAL AND CRUSH STIFFNESS PROPERTIES  
(NOTE: '\*\*' indicates default value)

	Vehicle #1		Vehicle #2	
CG TO FRONT AXLE	130.3 cm	**	130.3 cm	**
CG TO REAR AXLE	141.0 cm	**	141.0 cm	**
TRACKWIDTH	149.6 cm	**	149.6 cm	**
YAW MOMENT OF INERTIA	3497.2 kg-m^2	**	2877.9 kg-m^2	**
MASS	1629.3 kg		1340.8 kg	
BODY LENGTH FROM CG TO FRONT	228.1 cm	**	228.1 cm	**
BODY LENGTH FROM CG TO REAR	-270.3 cm	**	-270.3 cm	**
BODY OVERALL WIDTH	184.4 cm	**	184.4 cm	**

CRUSH STIFFNESSES:

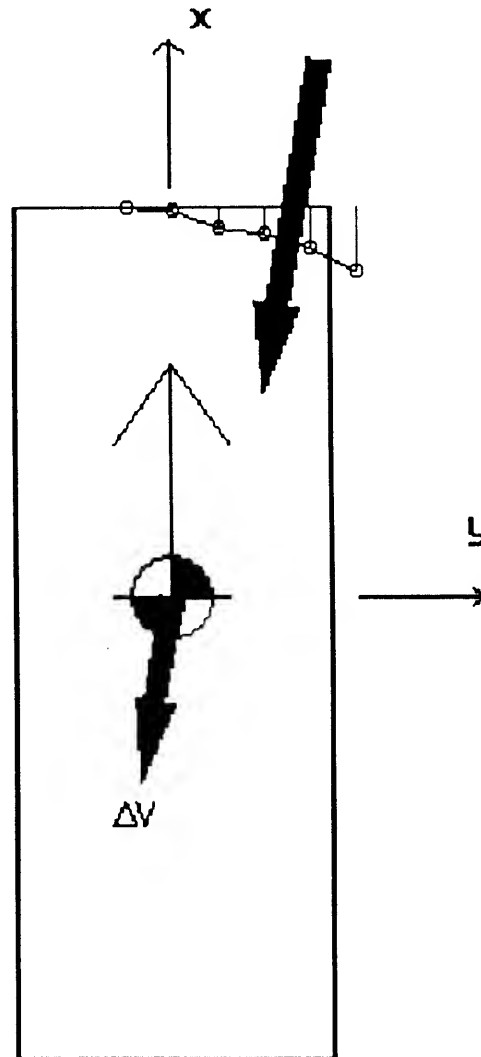
A	B	A	B
lb/in	lb/in^2	lb/in	lb/in^2
373.4 **	37.7 **	373.4 **	37.7 **

Vehicle No. 1



CDC/PDOF: 12FZEW2 -10.0 deg  
Max Impact Force: 157779 N

Vehicle No. 2



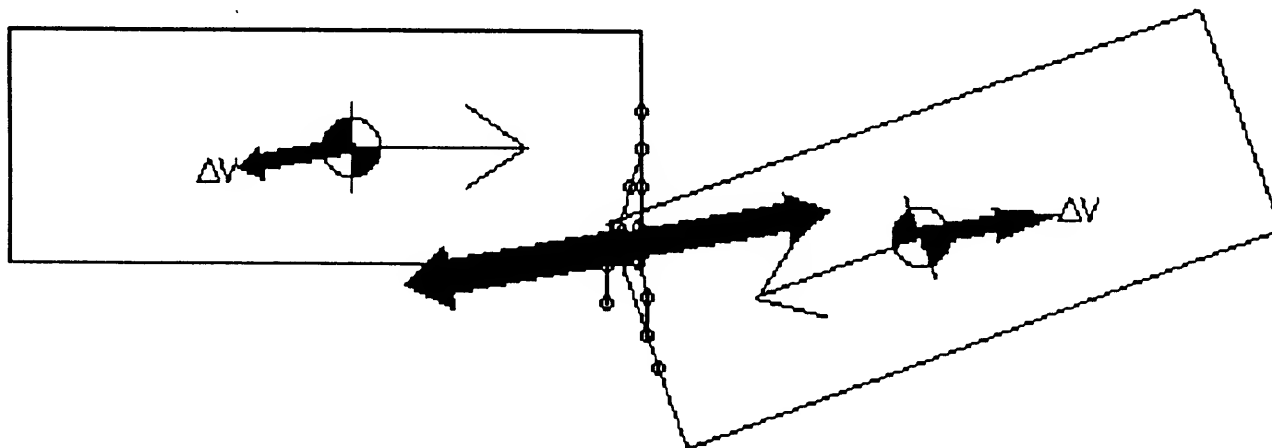
CDC/PDOF: 12FZEW2 10.0 deg  
Max Impact Force: 140540 N



EDCRASH  
Damage Profiles

	Veh #1	Veh #2
Delta-U (km/h):		
X	-18.6	-22.5
Y	3.3	-4.0
Tot	18.8	22.9

Crush Data (cm):		
W	150.0	136.0
D	46.0	42.0
C1	0.0	0.0
C2	1.0	2.0
C3	11.0	11.0
C4	20.0	15.0
C5	27.0	24.0
C6	29.0	36.0



EDCRASH  
At Impact

	Ueh #1	Ueh #2
Delta-U (km/h)		
(BASIS: Damage)		
X	-18.6	-22.5
Y	3.3	-4.0
Tot	18.8	22.9
PDOF	-10.0	10.0

UNITS: km/h,m,deg

(NO SCENE DATA)

## TRC VECTOR ANALYSIS ITERATIONS

The TRC Vector Analysis program was used to determine the resultant theoretical Direction of Principal Force (PDOF) for both vehicles. Heading angles were determined from a combination of the Police Accident Report, the scene, and the vehicle inspections, and weights were obtained from original specifications and the interviewees. Based on our inspection of the each vehicle's crush, this contractor initially estimated the PDOFs as -10 degrees for the case vehicle and +10 degrees for vehicle #2.

The driver of the case vehicle indicated in her interview that she was traveling about 40 km.p.h. (25 m.p.h.), well below the statutory SPEED LIMIT of 89 km.p.h. (55 m.p.h.), when she braked and steer left to avoid vehicle #2. Based on the road's speed limit, supported by the crush to both the case vehicle and vehicle #2, this contractor believes that the case vehicle was most likely traveling 64-80 km.p.h. (40-50 m.p.h.) prior to impact. Because pre-impact skidmarks were noted on the Police Accident Report, her speed at impact was most likely 48-64 km.p.h. (30-40 m.p.h.).

The driver of vehicle #2 indicated in her interview that she was traveling about 40 km.p.h. (25 m.p.h.), also well below the statutory SPEED LIMIT of 89 km.p.h. (55 m.p.h.), when she steer left to avoid the case vehicle. Once again, based on the road's speed limit and the crush to both vehicles, this contractor believes that vehicle #2 was most likely traveling 40-56 km.p.h. (25-35 m.p.h.) prior to impact. Since no pre-impact skidmarks were noted on the Police Accident Report, her speed at impact was most likely approximately 48 km.p.h. (30 m.p.h.).

Nine iterations of vehicle speeds are shown below: 48-64 km.p.h. (30-40 m.p.h.) for the case vehicle and 40-64 km.p.h. (25-35 m.p.h.) for vehicle #2. The program indicates that (1) as the case vehicle's speed increases, the force collinearity vector rotates no more than +1 degrees for both vehicles, and (2) as vehicle #2's speed increases, the force collinearity vector rotates no more than -1 degrees for the case vehicle and vehicle #2, respectively. Iterations 2, 3, 5, and 6 most closely match the observed vehicle crush. Therefore, the impact speeds for the case vehicle and vehicle #2 are most likely 56 km.p.h. (35 m.p.h.) and 48 km.p.h. (30 m.p.h.), respectively. In accordance with NASS, CDS protocol, the PDOFs were assigned at -10 for the case vehicle and +10 for vehicle #2.

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-18

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)	
Ln. Axis Heading Angle	155	320	(1)
CG Heading Angle	155	320	
CRASH 3 Slip Angle	0	0	
Weight-Cargo	2	5	
Weight-Vehicle Curb Wt	1510	1270	
Weight-Passenger(s)	120	68	
Weight-Total	1632	1343	
Estimated Speed	48 (30)	40 (25) m.p.h.	
Momentum	78336	53720	
PDOF (Degrees)	-6	9	91 STM
PDOF (Clock Direction)	12	12	
Theoretical Delta V	39.4	47.9	
Theoretical Common Vel.		10.0	Post-Crash CG Heading 183

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-18

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)	
Ln. Axis Heading Angle	155	320	(2)
CG Heading Angle	155	320	
CRASH 3 Slip Angle	0	0	
Weight-Cargo	2	5	
Weight-Vehicle Curb Wt	1510	1270	
Weight-Passenger(s)	120	68	
Weight-Total	1632	1343	
Estimated Speed	48 (30)	48 (30) m.p.h.	
Momentum	78336	64464	
PDOF (Degrees)	-7	8	91 STM
PDOF (Clock Direction)	12	12	
Theoretical Delta V	43.0	52.2	
Theoretical Common Vel.		7.8	Post-Crash CG Heading 201

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-18

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)
Ln. Axis Heading Angle	155	320
CG Heading Angle	155	320
CRASH 3 Slip Angle	0	0
Weight-Cargo	2	5
Weight-Vehicle Curb Wt	1510	1270
Weight-Passenger(s)	120	68
Weight-Total	1632	1343
Estimated Speed	48 (30)	56 (35) m.p.h.
Momentum	78336	75208
PDOF (Degrees)	-7	8
PDOF (Clock Direction)	12	12
Theoretical Delta V	46.5	56.6
Theoretical Common Vel.	6.8	Post-Crash CG Heading 229

(3)

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-18

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)
Ln. Axis Heading Angle	155	320
CG Heading Angle	155	320
CRASH 3 Slip Angle	0	0
Weight-Cargo	2	5
Weight-Vehicle Curb Wt	1510	1270
Weight-Passenger(s)	120	68
Weight-Total	1632	1343
Estimated Speed	56 (35)	40 (25) m.p.h.
Momentum	91392	53720
PDOF (Degrees)	-6	9
PDOF (Clock Direction)	12	12
Theoretical Delta V	43.0	52.2
Theoretical Common Vel.	14.1	Post-Crash CG Heading 174

(4)



PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-18

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)	
Ln. Axis Heading Angle	155	320	
CG Heading Angle	155	320	
CRASH 3 Slip Angle	0	0	
Weight-Cargo	2	5	
Weight-Vehicle Curb Wt	1510	1270	
Weight-Passenger(s)	120	68	
Weight-Total	1632	1343	
Estimated Speed	56 (35)	48 (30) m.p.h.	
Momentum	91392	64464	
PDOF (Degrees)	-6	9	91 STM
PDOF (Clock Direction)	12	12	
Theoretical Delta V	46.5	56.6	
Theoretical Common Vel.		11.3	Post-Crash CG Heading 185

(5)

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-18

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)	
Ln. Axis Heading Angle	155	320	
CG Heading Angle	155	320	
CRASH 3 Slip Angle	0	0	
Weight-Cargo	2	5	
Weight-Vehicle Curb Wt	1510	1270	
Weight-Passenger(s)	120	68	
Weight-Total	1632	1343	
Estimated Speed	56 (35)	56 (35) m.p.h.	
Momentum	91392	75208	
PDOF (Degrees)	-7	8	91 STM
PDOF (Clock Direction)	12	12	
Theoretical Delta V	50.1	60.9	
Theoretical Common Vel.		9.1	Post-Crash CG Heading 201

(6)

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-18

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)	
Ln. Axis Heading Angle	155	320	(7)
CG Heading Angle	155	320	
CRASH 3 Slip Angle	0	0	
Weight-Cargo	2	5	
Weight-Vehicle Curb Wt	1510	1270	
Weight-Passenger(s)	120	68	
Weight-Total	1632	1343	
Estimated Speed	64 (40)	40 (25) m.p.h	
Momentum	104448	53720	
PDOF (Degrees)	-5	10	91 STM
PDOF (Clock Direction)	12	12	
Theoretical Delta V	46.6	56.6	
Theoretical Common Vel.	18.3	Post-Crash CG Heading	170

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-18

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)	
Ln. Axis Heading Angle	155	320	(8)
CG Heading Angle	155	320	
CRASH 3 Slip Angle	0	0	
Weight-Cargo	2	5	
Weight-Vehicle Curb Wt	1510	1270	
Weight-Passenger(s)	120	68	
Weight-Total	1632	1343	
Estimated Speed	64 (40)	48 (30) m.p.h.	
Momentum	104448	64464	
PDOF (Degrees)	-6	9	91 STM
PDOF (Clock Direction)	12	12	
Theoretical Delta V	50.1	60.9	
Theoretical Common Vel.	15.2	Post-Crash CG Heading	177

PDOF & Delta V Estimation From At Impact Heading Angles, Slip, and Momentum

Case Number: TRC/IU 96-18

Vehicle Numbers: 01 and 02

(Both Vehicles Must Be Tracking Or CRASH 3 Slip Angle(s) Estimated)

(Neither Vehicle May Be Backing)

(If The Back Of A Vehicle Is Involved, Its Speed Must Be Set To Zero)

(Some Configurations Involving Heavy Trucks Give Erroneous Results)

Vector Analysis Area	GV27(V01)	GV28(V02)	(9)	
Ln. Axis Heading Angle	155	320		
CG Heading Angle	155	320		
CRASH 3 Slip Angle	0	0		
Weight-Cargo	2	5		
Weight-Vehicle Curb Wt	1510	1270		
Weight-Passenger(s)	120	68		
Weight-Total	1632	1343		
Estimated Speed	64 (40)	56 (35) m.p.h.		
Momentum	104448	75208		
PDOF (Degrees)	-6	9	91	STM
PDOF (Clock Direction)	12	12		
Theoretical Delta V	53.7	65.3		
Theoretical Common Vel.		12.5	Post-Crash CG Heading	186

## TRC VECTOR ANALYSIS PROGRAM

PDOF (Direction of Principal Force) is assigned based on the vehicular crush. Heading Angles are assigned based on scene evidence and Police Accident Reported crash configurations. This program was created to enable researchers in the NASS CDS to assess the compatibility of their assigned vehicle PDOFs and heading angles. When two vehicles are involved in an impact, researchers were often times submitting PDOFs that were not compatible with their heading angle assignments, indicating a lack of understanding of basic vector analysis concepts. Subsequently, the TRC has used this program to help verify our field PDOF assignments by making logical changes in the reconstructed crash configuration and determining the affect these changes have on PDOF.

**Principal:** This program is based on the geometric triangle rule (i.e., the sum of the three angles of a triangle must equal 180 degrees). The direction of one vehicle's (e.g., the case vehicle or Vehicle #1) CG (i.e., Center of Gravity) forms one side of the triangle. The direction of the other vehicle's (e.g., Vehicle #2) CG forms a second side of the triangle. The third side of the triangle is then formed by each vehicle's respective PDOF because the forces are assumed to act collinear.

**Assumptions:** It is assumed that each vehicle's weight can be represented by a *"point-mass"*. It is assumed that the vector force acting on each vehicle goes through the center of gravity (i.e., CG) of the vehicle. Further, it is assumed that the vehicles move off together joined as one object. This program does not take into affect the mass reduction that occurs in other reconstruction programs since its primary purpose is to check the compatibility of the field determined PDOF and Heading Angle.

**Inputs:** Heading Angle, Slip Angle (*"Yaw"*), Weights (Curb Weight, Cargo Weight, and Weight of all occupants), and Speed

**Outputs:** This program's primary output is each vehicle's theoretical PDOF, presented in both degrees and CDC clock directions. Other outputs include a theoretical Delta V and a theoretical Common Velocity. The theoretical Delta V shows the maximum Delta V for the given speeds and weights assuming a dead center impact. For special crash investigation purposes, the last two outputs should be essentially ignored.

**Use:** The TRC uses this program on nonaxial collisions involving two vehicles to vary the *"less established inputs"* in order to determine what theoretical affect these changes have on our field observed PDOFs. The most solid input is the weights of the respective vehicles. Even though the cargo weight is rarely accurately known, its order of magnitude is such that in the vast majority of crashes its affect is minor. The next solid inputs are the vehicle's heading angle and slip angle. In most cases these are fairly well known from the available physical evidence. The least solid input is the vehicle's speed. The submitted iterations show the inputs and what variations to those inputs that the TRC took into consideration. The PDOF outcomes are then compared with our field observed PDOF and adjustments are made, if necessary, in our final coding.

**Purpose:** This program is but one more tool in the hands of a researcher aimed at providing the best data.

**Appendix B:**

**REPORT OF CONSULTANT ENGINEER**

[REDACTED]  
REGISTERED PROFESSIONAL ENGINEER

[REDACTED] INDIANA [REDACTED]  
[REDACTED]  
[REDACTED]  
[REDACTED] 1996

[REDACTED]  
Indiana University Transportation Research Center  
[REDACTED]  
[REDACTED], IN  
[REDACTED]

Re: TRC case SCI 96-18  
Kansas, 1996

Dear Mr. [REDACTED]

This letter will report my findings regarding the subject crash in which a 1995 Chevrolet Lumina 4-door sedan (the case vehicle) was southbound on a county road and a 1988 Chevrolet Corsica 4-door sedan was northbound on the same road in [REDACTED], in [REDACTED] 1996. In the crash the fronts of the two vehicles impacted upon each other, the driver and passenger airbags in the case vehicle deployed, and the right front passenger in the case vehicle, a 5-year old boy, was killed. You asked me to examine the seat belts and to consider whether the right front passenger in the case vehicle was using his seat belt, and if so, in what manner at the time of the crash.

#### Sources

I have reviewed the following sources of information concerning this crash:

1. Police accident report.
2. Photographs of the crash scene and of the crash vehicles.
3. Information that the delta-v of the case vehicle was approximately 12 miles per hour, based upon your measurements of the two vehicles and your reconstruction using recognized computer programs and techniques.
4. Information that at the time of the crash the right front passenger was 5 years old, weighed approximately 42 lbs, was not using a booster seat, and did not sustain any body markings associated with seat belts.

5. Information that the vehicle mileage was approximately 33,295 at the time of the crash.
6. My inspection at your office of the driver seat belt outboard assembly, the front passenger seat belt inboard and outboard assemblies, and the passenger air bag module, materials which you had previously removed from the case vehicle with the assistance of a mechanic.

## Findings

I inspected and, with your assistance, photographed the driver and right front passenger outboard seat belt assemblies, and also the inboard assembly of the passenger restraint system. I also inspected the passenger air bag module and cover flap. This vehicle utilizes a three-point, continuous loop, single retractor belt system with free sliding latch plate at both front outboard front seating positions. The passenger seat belt retractor is switchable from emergency locking mode to automatic locking mode to permit use of a forward facing child restraint in the right front seat. The passenger inflatable restraint is a tethered bag with vent holes at the right and left sides.

On the driver and passenger seat belt restraint systems I noted cumulative usage, as indicated by latch plate wear, webbing wear, and retractor tooth wear, consistent with the mileage of the vehicle. On each seat belt I examined the outboard anchor and adjacent webbing, the length of the webbing along both sides of the webbing considering particularly the areas where it would contact the latch plate and D-ring in use, the latch plate, the D-ring, the retractor spool teeth and the retractor lock bar. I also inspected the buckle, sheath, and inboard anchor of the passenger restraint system.

The webbing was wrinkled in certain areas on both the driver and passenger belts, a result of use and of post-removal storage. There were smudges and torn fibers on the drivers belt attributable to closing it in the door. There were stains on the passenger belt which could be from closing it in the door, but also appeared consistent with greasy finger marks. The latch plates and the B-pillar guide rings are entirely unmarked on the parts of the webbing pass through where webbing pressure would occur in this crash. The webbing in the area of the black smudges and also in the areas of engagement with the latch plate and B-pillar guide ring was examined under magnification. The fibers were not abraded they retain a shiny

surface consistent with the age and mileage of the vehicle. The black smudges are foreign material deposited into the crevices of the weave. The retractor internal parts have areas where the metal plating is abraded from use and also areas where it is abraded from other causes such as parts scuffing together prior to assembly. On each retractor, one of the toothed wheels leads the other slightly, and both the leading and trailing wheels were marked from lock bar contact at several of the teeth. Teeth on which the marking was more pronounced were compared with the corresponding tooth of the other toothed wheel, but no pairs of marked teeth were found.

### Conclusion

There is no indication on any part of the restraint system that the right front passenger was using his seat belt in any manner at the time of the crash. This lack of positive findings does not, however, establish that he was not using the seat belt. Considering the right front passenger's weight (only 42 lbs) and the modest severity of the crash (12 mph delta-v, approximately frontal direction) pronounced marking of the restraint system would not be expected if he had used it in this crash. The lack of positive findings in any of the several places which I had the opportunity to examine thoroughly is supportive of a conclusion of non-use but would provide no support for a conclusion that the right front passenger's belt was used in this crash.

Please let me know if I may provide additional information concerning this report.

Sincerely yours,

PHD PE



## Appendix C:

### SELECTED PHOTOGRAPHS: SCENE AND VEHICLES

A total of eight-six color copies of photographs are presented and referenced as Photograph #01 through Photograph #86. Photographs numbered #07, #09, #14 through #21, #32, #35, and #84 were taken and made available by the applicable [REDACTED]. [REDACTED] The remainder of these photographs were taken by the Transportation Research Center.



# 01: Case Vehicle's southward travel path in center of gravel road approximately 30 meters (98 feet) north of impact [i.e., orange vest in road (cells D5--D6)]



# 02: Case vehicle's southward travel path in center of gravel road (i.e., in northbound lane) approximately 20 meters (66 feet) north of impact (i.e., orange vest)





# 03: Case Vehicle's southeastward travel path in left curve, primarily in northbound lane approximately 10 meters (33 feet) north of impact (i.e., orange vest)



# 04: Case Vehicle's southeastward travel path in left curve, primarily in northbound lane near approximate point of impact (i.e., orange vest)





# 05: Northeastward view of Case Vehicle's southbound travel path through inside part of the curve, primarily in northbound lane from south of point of impact



# 06: Vehicle #2's westward travel path on gravel road prior to entering right-hand curve to go northbound





# 07: On-scene view of Vehicle #2's westward travel path entering right curve from center of roadway, approximately 55 meters (180 feet) southeast of impact



# 08: Vehicle #2's westward travel path entering right curve approximately 45 meters (148 feet) southeast of impact





# 09: On-scene northwestward view from center of roadway approximately 45 meters (148 feet) from impact showing Vehicle #2 and Case Vehicle at final rest



# 10: Vehicle #2's north-northwestward travel path in right curve lane approximately 30 meters (98 feet) southeast of impact [i.e., orange vest (cell G5) in road]





# 11: Vehicle #2's northwestward travel path in right curve approximately 20 meters (66 feet) southeast of impact (i.e., orange vest)



# 12: Vehicle #2's northwestward travel path in right curve approximately 5 meters (16 feet) southeast of impact (i.e., orange vest)





# 13: Southeastward view of Vehicle #2's northwestward travel path in right curve from north of point of impact (i.e., orange vest in road)



# 14: On-scene northwestward view of Vehicle #2 (foreground) and Case Vehicle (background) at final rest; NOTE: both drivers steered toward outside of curve



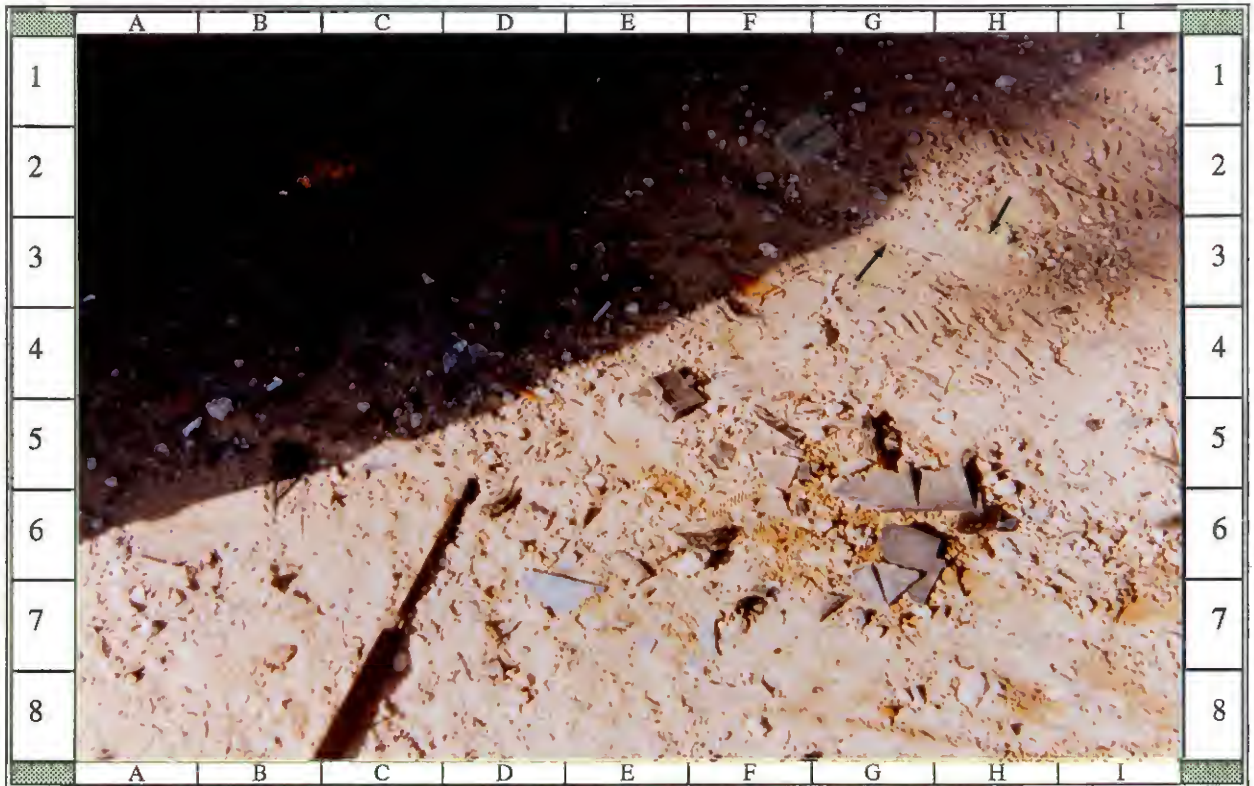


# 15: On-scene eastward view of Case Vehicle (left) and Vehicle #2 (right) at final rest;  
NOTE: Vehicle #2 was knocked back from point of impact



# 16: On-scene close-up at point of impact of debris in roadway from both vehicles;  
NOTE: gouge to ground from Case Vehicle's undercarriage (cells F5--E3)





# 17: On-scene closer-up at point of impact of debris in roadway from both vehicles;  
NOTE: Case Vehicle's undercarriage contact to ground (cells H3--E1)



# 18: On-scene southeastward close-up view of braking mark on gravel roadway from  
Case Vehicle's left front tire (cells C7-E1) viewed from behind right rear tire





# 19: On-scene westward close-up of braking mark from Case Vehicle's left front tire of (cells B6-I5); NOTE: Case Vehicle equipped with anti-lock braking system



# 20: On-scene southeastward view of Vehicle #2 at final rest from bumper level just behind Case Vehicle's front right; NOTE: Vehicle #2's radiator spill





# 21: On-scene northward view of Case Vehicle's damaged front right; NOTE: direct damage begins near manufacturer's logo (cell E6)



# 22: Case Vehicle's damaged front end with contour gauge present; NOTE: yellow tape at C<sub>3</sub> marks beginning of direct damage

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





# 23: Close-up of direct damage to Case Vehicle's front right with contour gauge present; NOTE: underride type damage toward front right corner



# 24: Overhead view. Case Vehicle's frontal damaged showing crush envelope and maximum crush at C<sub>6</sub>





# 25: Case Vehicle's damaged front viewed from approximately 30 degrees left of front; NOTE: induced damage to left front bumper corner (cells F7--G6)



# 26: Reference line view of Case Vehicle's frontal damage from left with contour gauge present; NOTE: induced damage to left front bumper corner





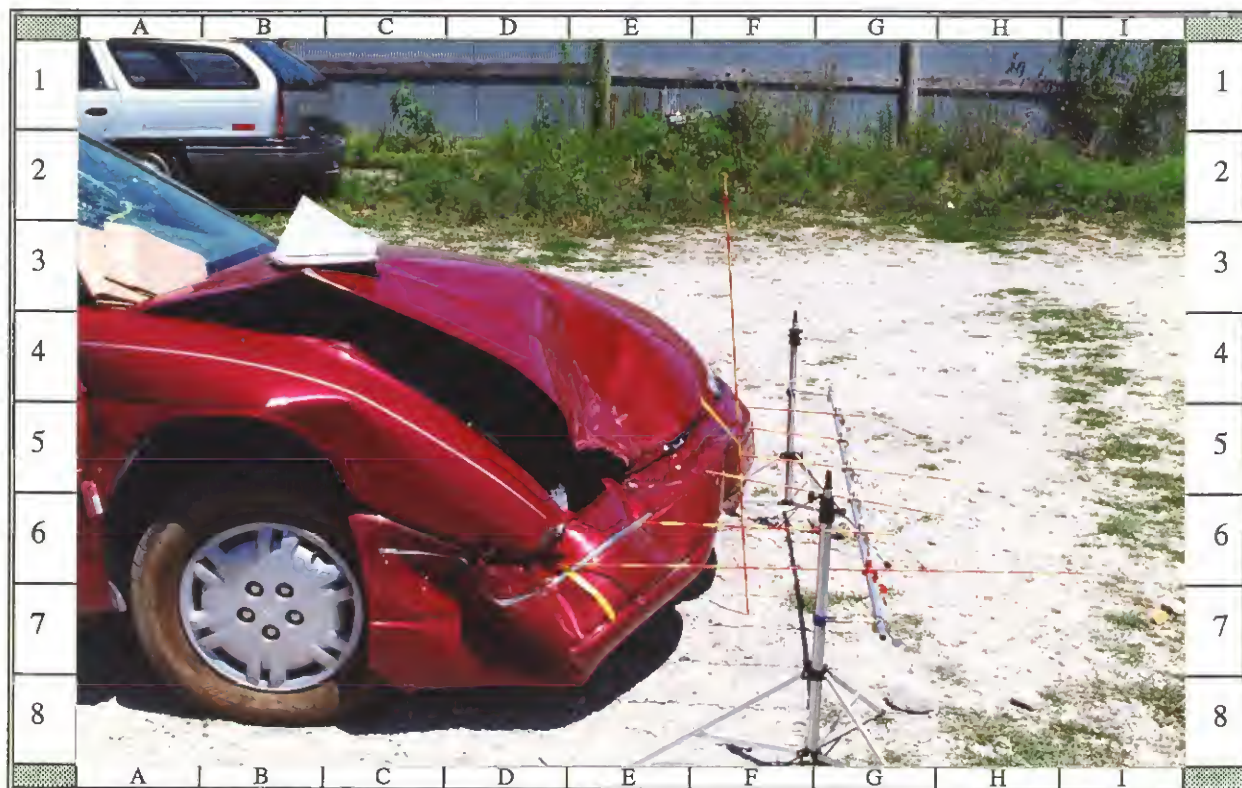
# 27: Case Vehicle's undamaged back and left side viewed from approximately 45 degrees left of back



# 28: Case Vehicle's undamaged back and right side (i.e. behind right front wheel) viewed from approximately 30 degrees right of back

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





# 29: Reference line view of Case Vehicle's frontal damage from right with contour gauge present showing crush envelope and maximum crush at C<sub>6</sub>



# 30: Case Vehicle's damaged front viewed from approximately 45 degrees right of front; NOTE: bumper shifted to right and underride type damage pattern

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





# 31: Vertical reference line view of Case Vehicle's right side from front showing rightward bumper shift; NOTE: right front windshield damage



# 32: On-scene close-up of Case Vehicle's right front windshield damage; NOTE: passenger air bag's cover flap caused damage during deployment

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in³) V-6 MPFI





# 33: Interior surface of Case Vehicle's driver door, seating area, and deployed air bag;  
NOTE yellow tape indicates contacted area (cells G3--H4)



# 34: Close-up of Case Vehicle's noncontacted driver side knee bolster, steering column, and lower dash





# 35: On-scene view of Case Vehicle's front seating area showing deployed air bags;  
NOTE: rear view mirror hanging down



# 36: Case Vehicle's front seating area showing deployed air bags and damaged rear-view mirror; NOTE: contacts highlighted by yellow tape and green dots



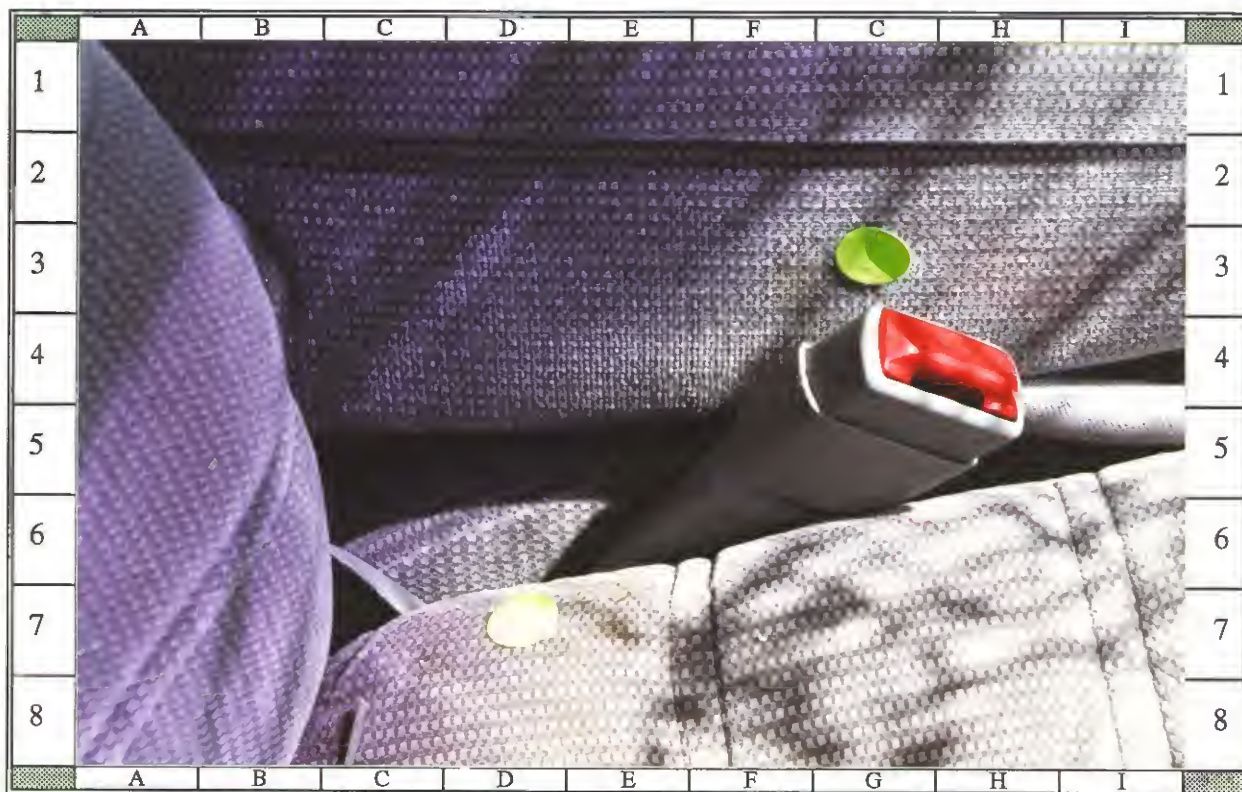


# 37: Vertical close-up view of mucous on Case Vehicle's center armrest (on driver's side) and blood on driver's seat cushion from right front passenger



# 38: Case Vehicle's center armrest (passenger's side) and right front passenger's seat cushion showing possible blood smear on armrest and seat





# 39: Close-up view of possible blood smear on Case Vehicle's center armrest and right front passenger's seat cushion



# 40: Case Vehicle's driver side adjustable shoulder belt anchorage showing anchorage at the full down position





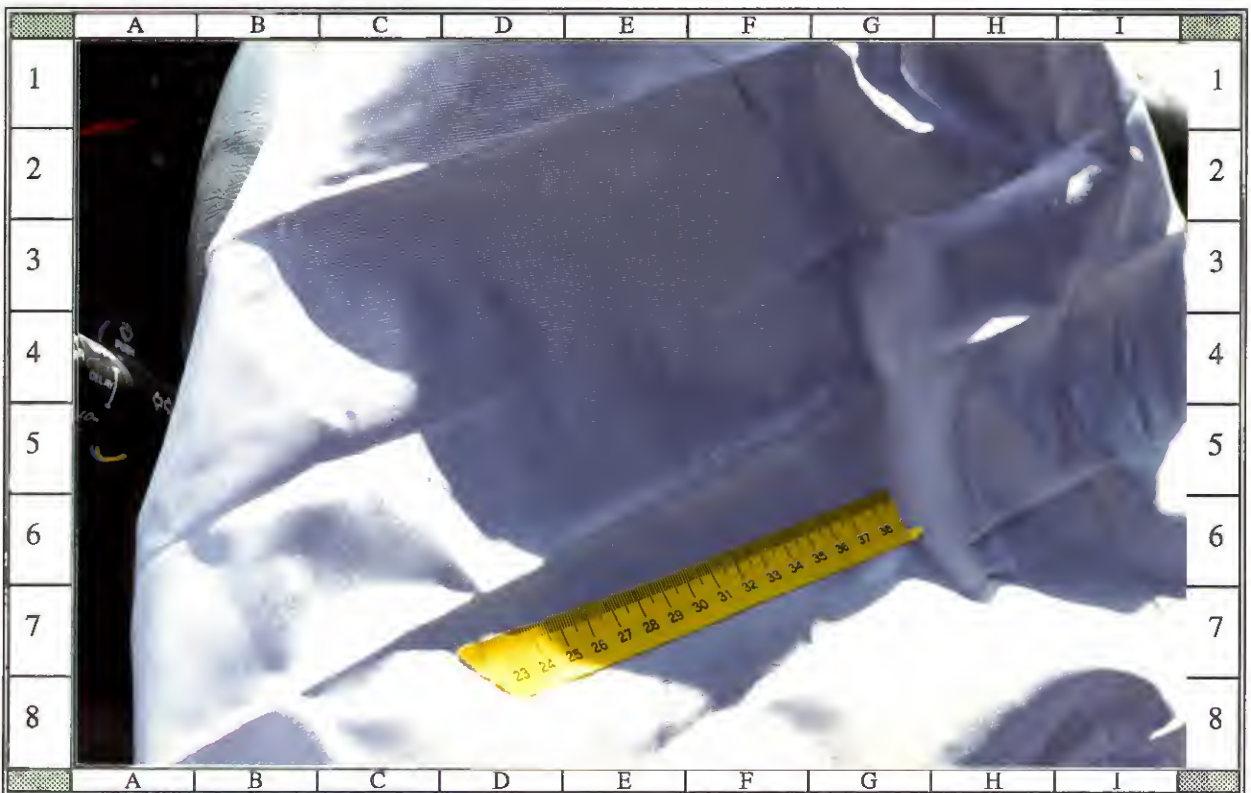
# 41: Vertical view of Case Vehicle's driver seating area from center rear showing greenhouse and deployed air bag; NOTE: tape highlights contact on air bag



# 42: Close-up of Case Vehicle's deployed driver side air bag viewed from center showing contact area on air bag between yellow tape



# 43: Closer-up view of top portion of contact area on Case Vehicle's deployed driver air bag (i.e., below yellow tape); NOTE: steering wheel rim is bent at top

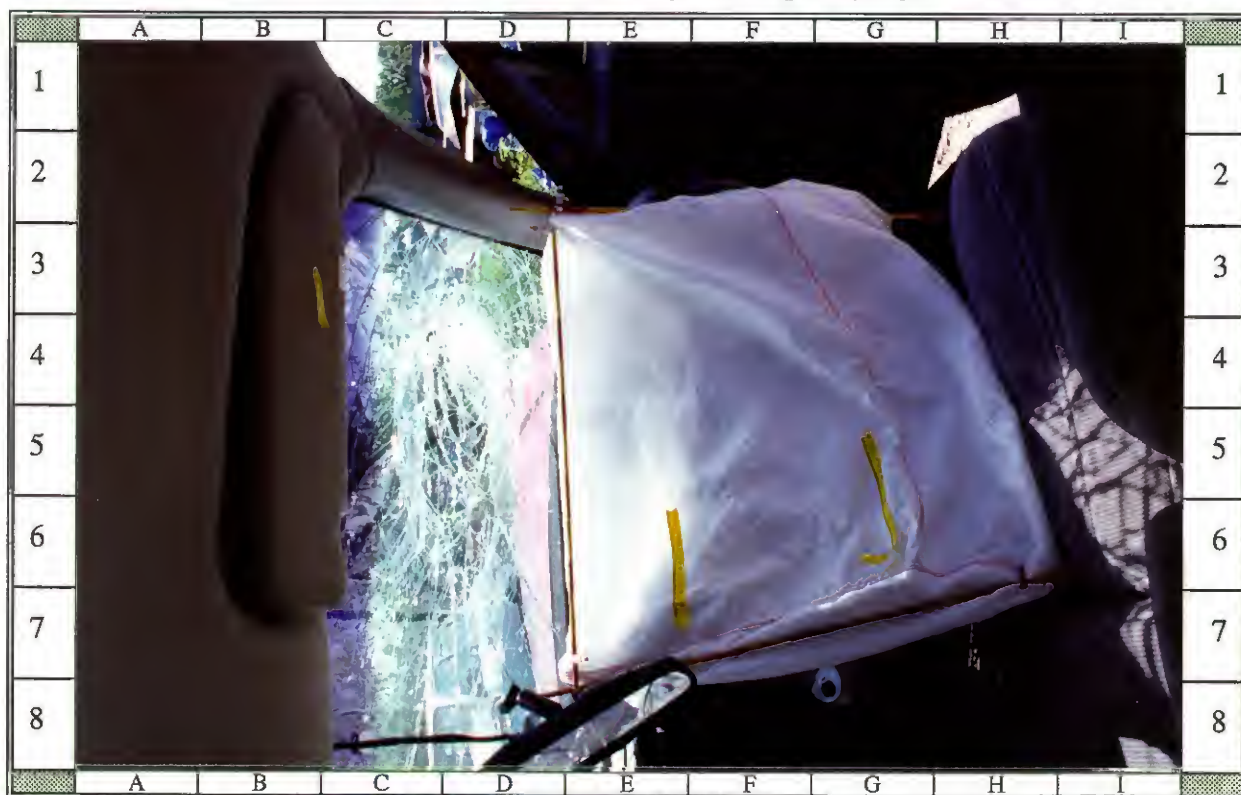


# 44: Closer-up view of center and bottom portions of contact area on Case Vehicle's deployed driver air bag showing skin and possible eye makeup marks





# 45: Case Vehicle's deployed air bags, windshield, rearview mirror, and headers viewed from center rear seat; NOTE: yellow tape highlights contact areas



# 46: Vertical view of Case Vehicle's right front seating area viewed from center rear showing deployed passenger air bag, windshield, and rearview mirror





# 47: Close-up of contact (i.e. skin and oil) area--between yellow tape, on Case Vehicle's right front passenger air bag (cells D2--E6)



# 48: Closer-up view of contacts (i.e., skin and oil transfer) to left upper portion of Case Vehicle's deployed right front passenger air bag (cells C7--E4)



# 49: Closer-up view of contacts (i.e., skin and oil transfer) to left center portion of Case Vehicle's deployed right front passenger air bag (cells C4--E2)



# 50: Underneath view of Case Vehicle's deployed right front passenger air bag showing no contact evidence; NOTE: tape on sunvisor



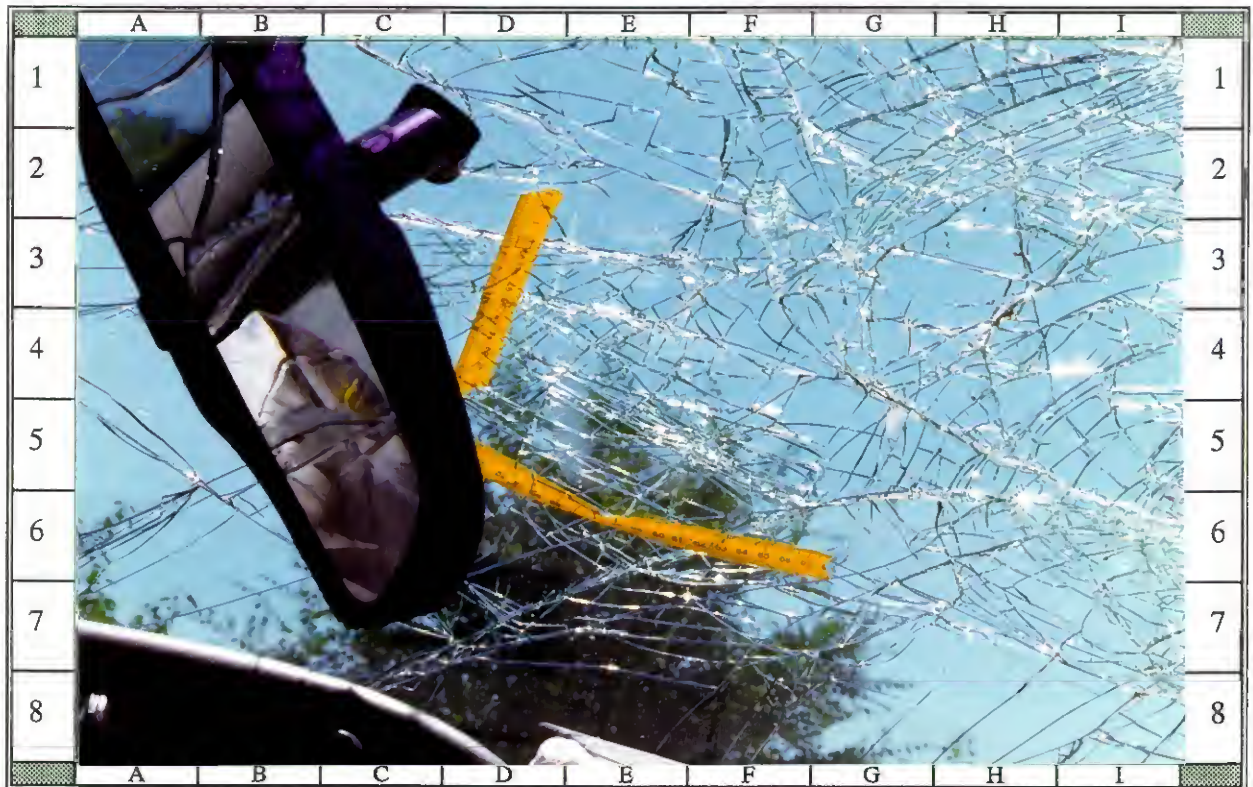


# 51: Close-up of Case Vehicle's right front passenger sunvisor showing possible head contact (above tape toward top of photograph)

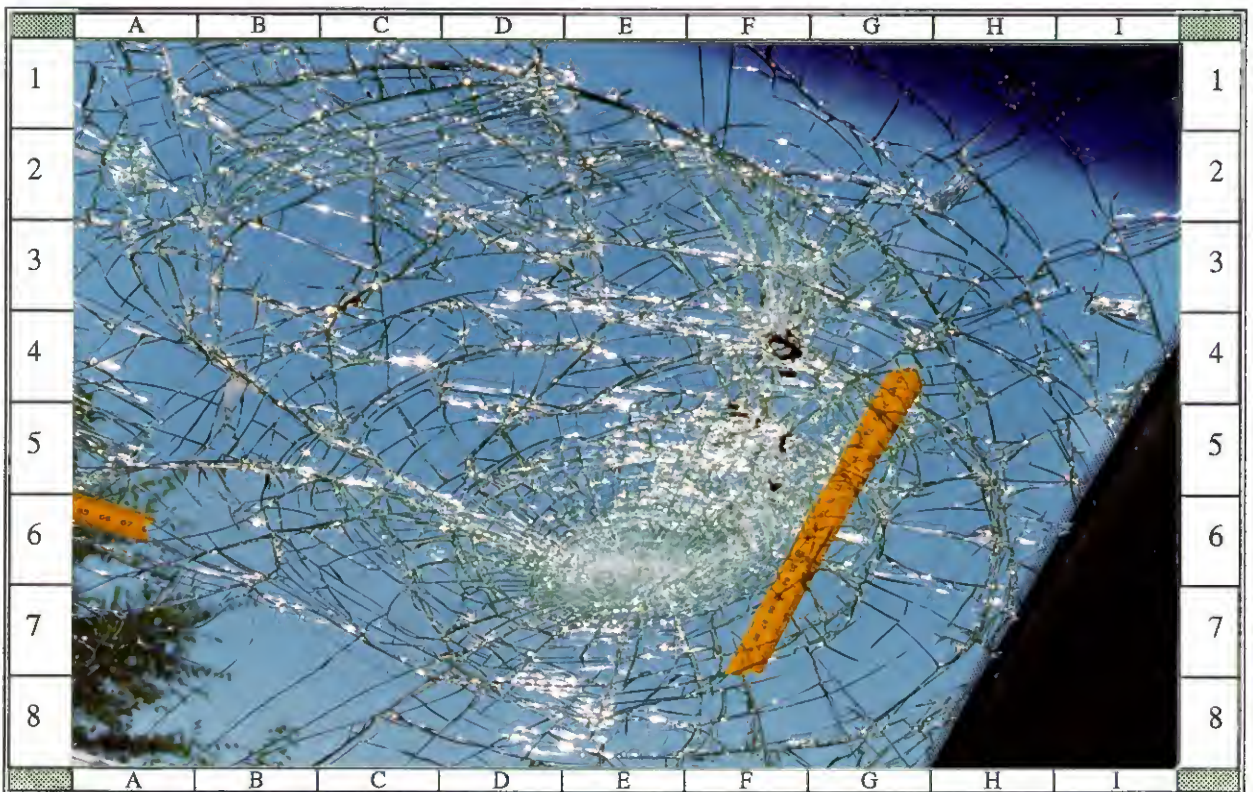


# 52: Case Vehicle's windshield damaged from right front air bag module's top cover flap (i.e., deployment door); NOTE: no contact evidence on rearview mirror





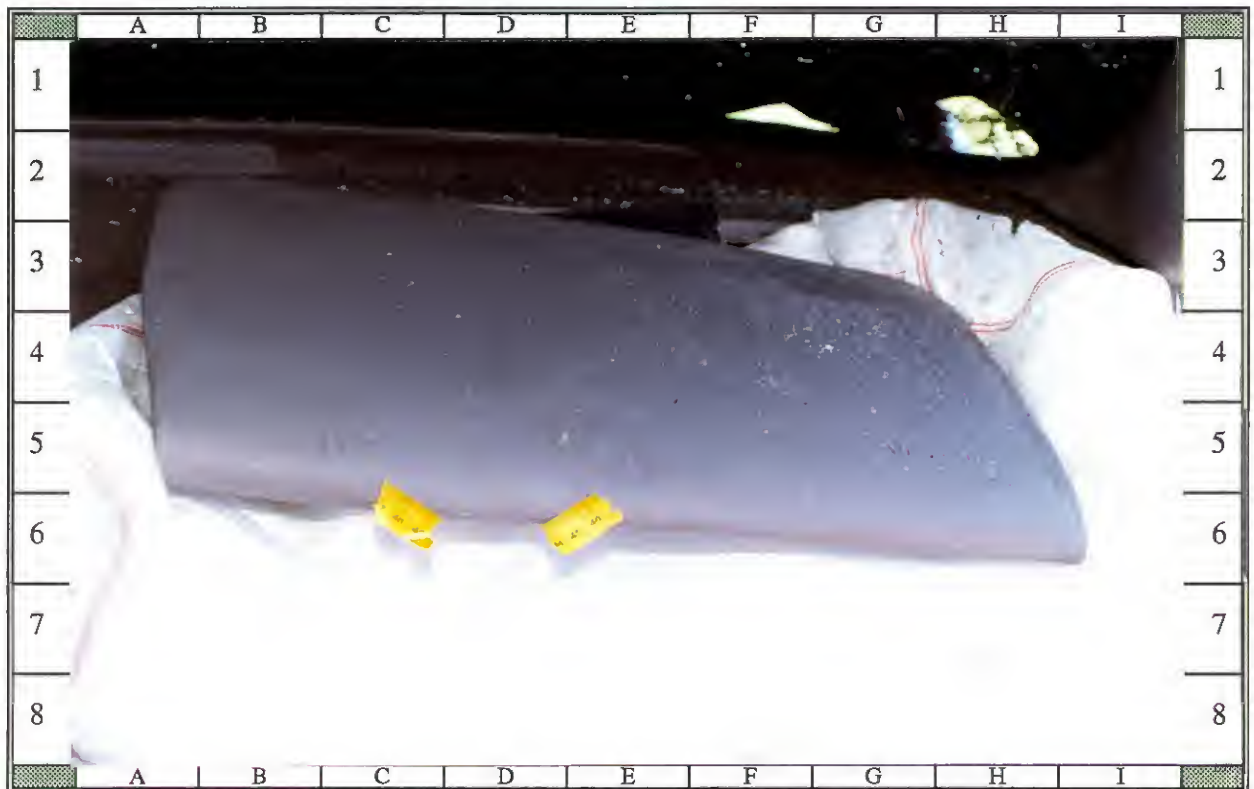
# 53: Close-up of Case Vehicle's windshield showing (yellow tape outlines) transfer from left lower corner of air bag module's top cover flap



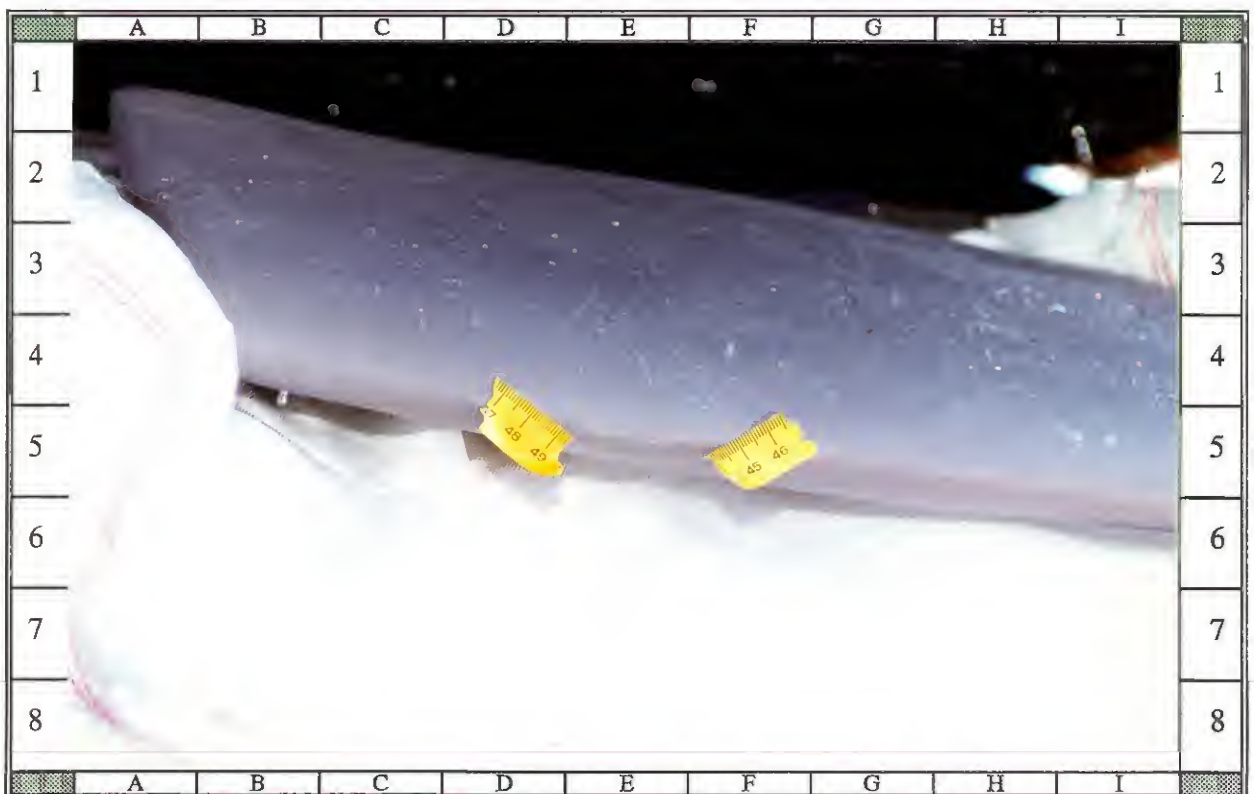
# 54: Close-up of Case Vehicle's windshield showing (yellow tape) transfer (embedded gray vinyl--cells F4--F5) from right side of air bag module's top cover flap

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI

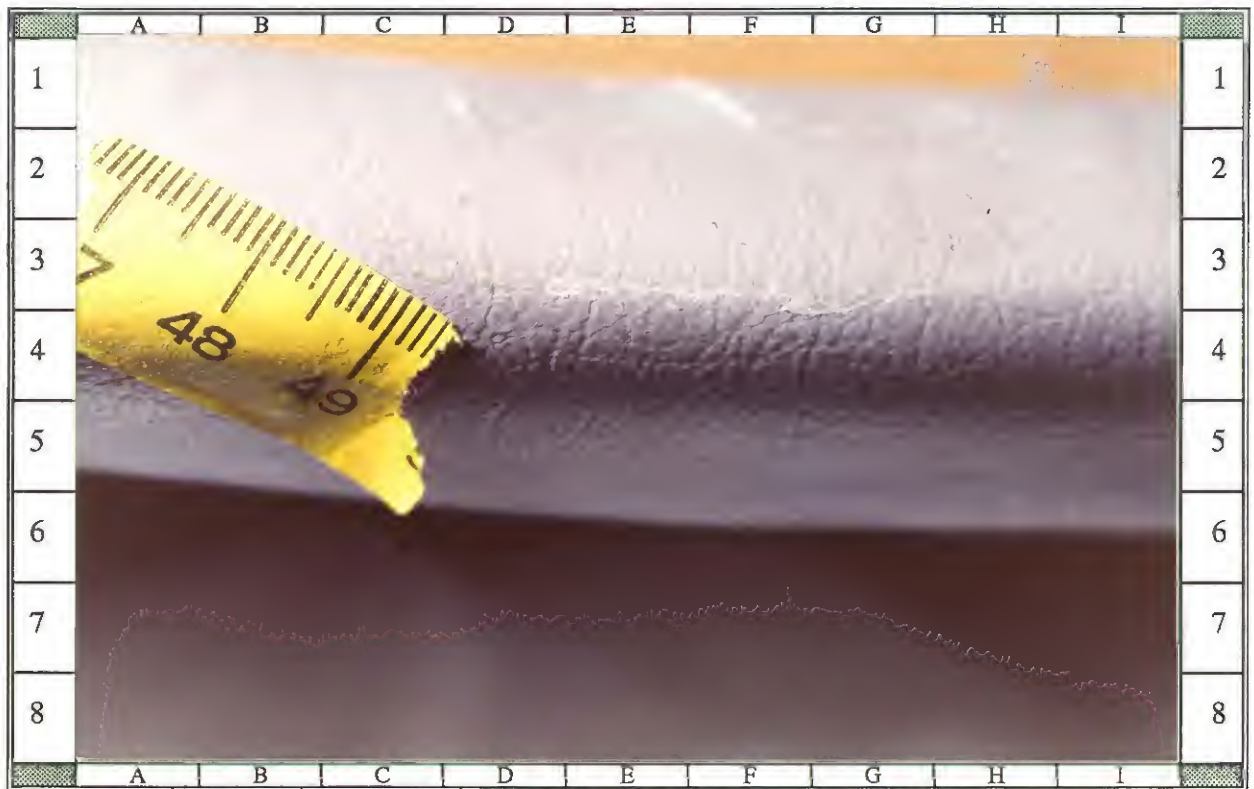




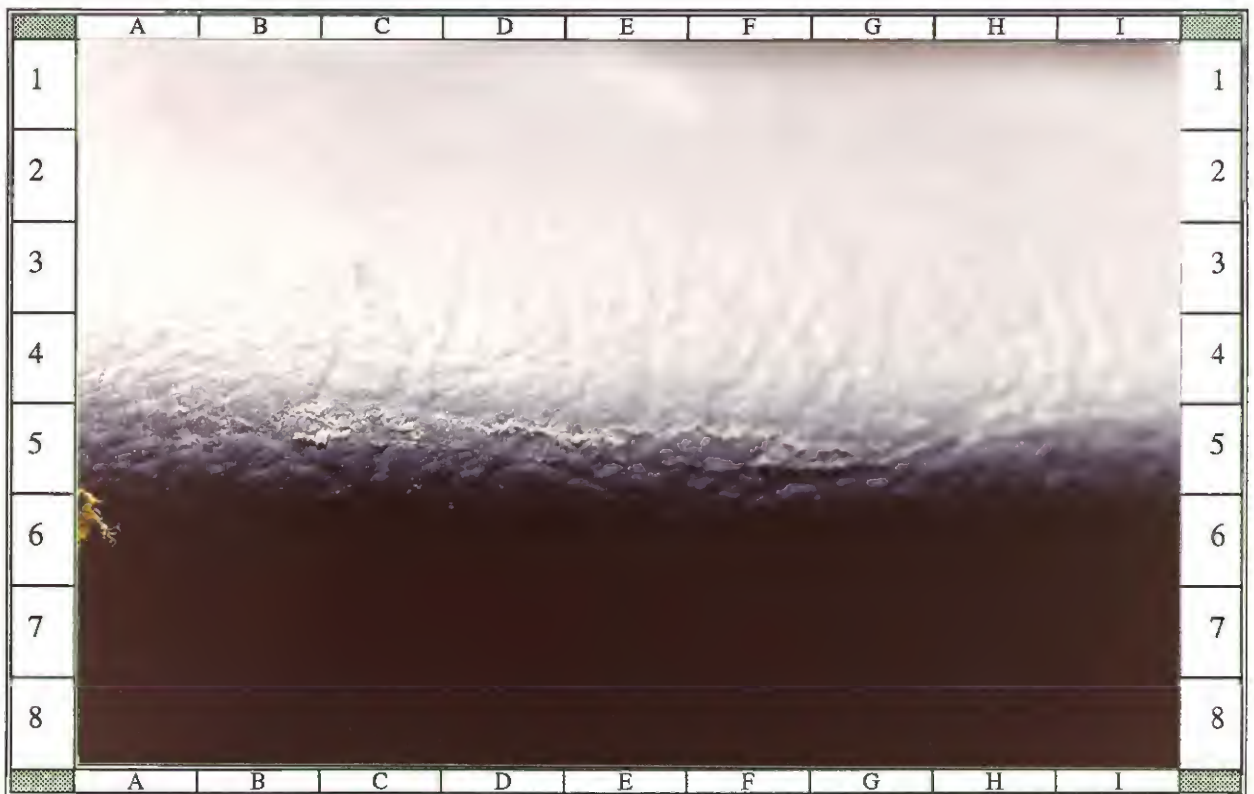
# 55: Case Vehicle's right front air bag module's top cover flap showing suspected occupant contact (tape) and scratches (cells C5--H6) from windshield



# 56: Close-up of scratches (cells C3--I5) and suspected skin transfer (tape) to leading edge of Case Vehicle's right front air bag module's top cover flap



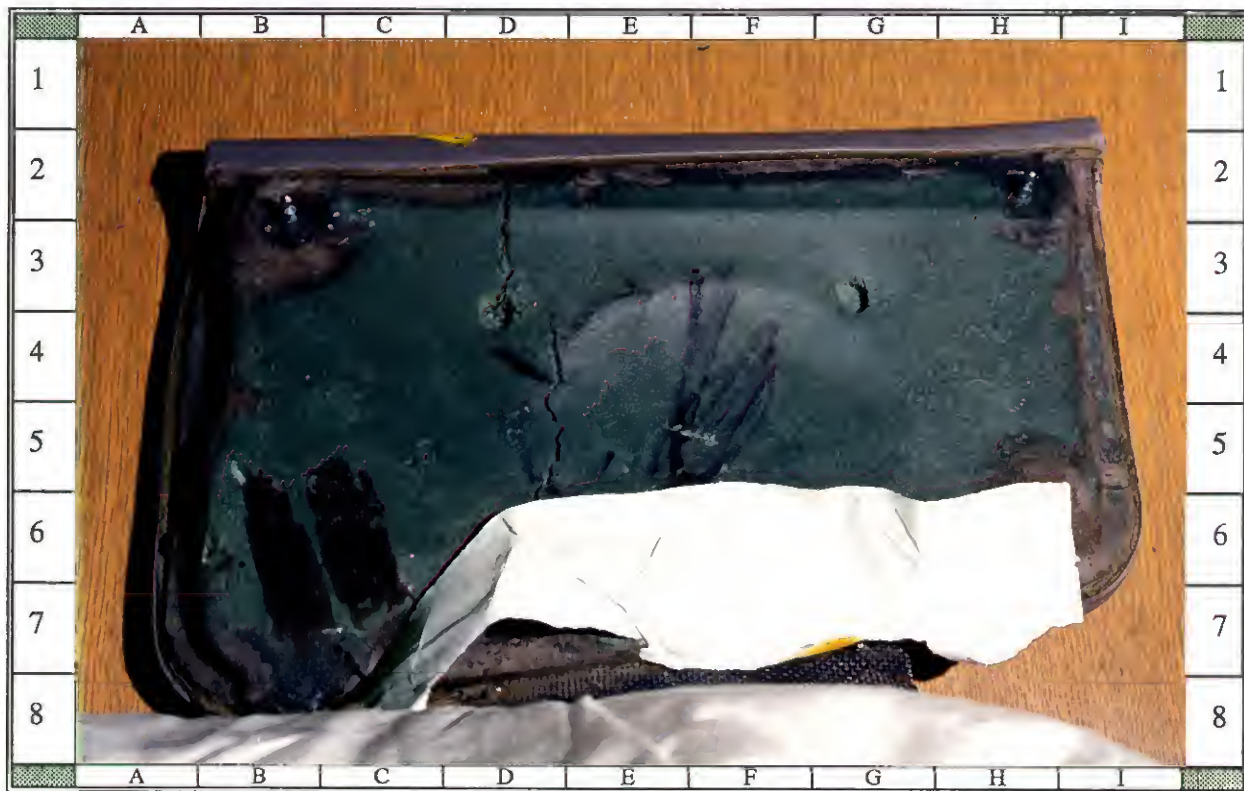
# 57: Closer-up view of Case Vehicle's right front air bag module's top cover flap showing suspected skin transfer to leading edge



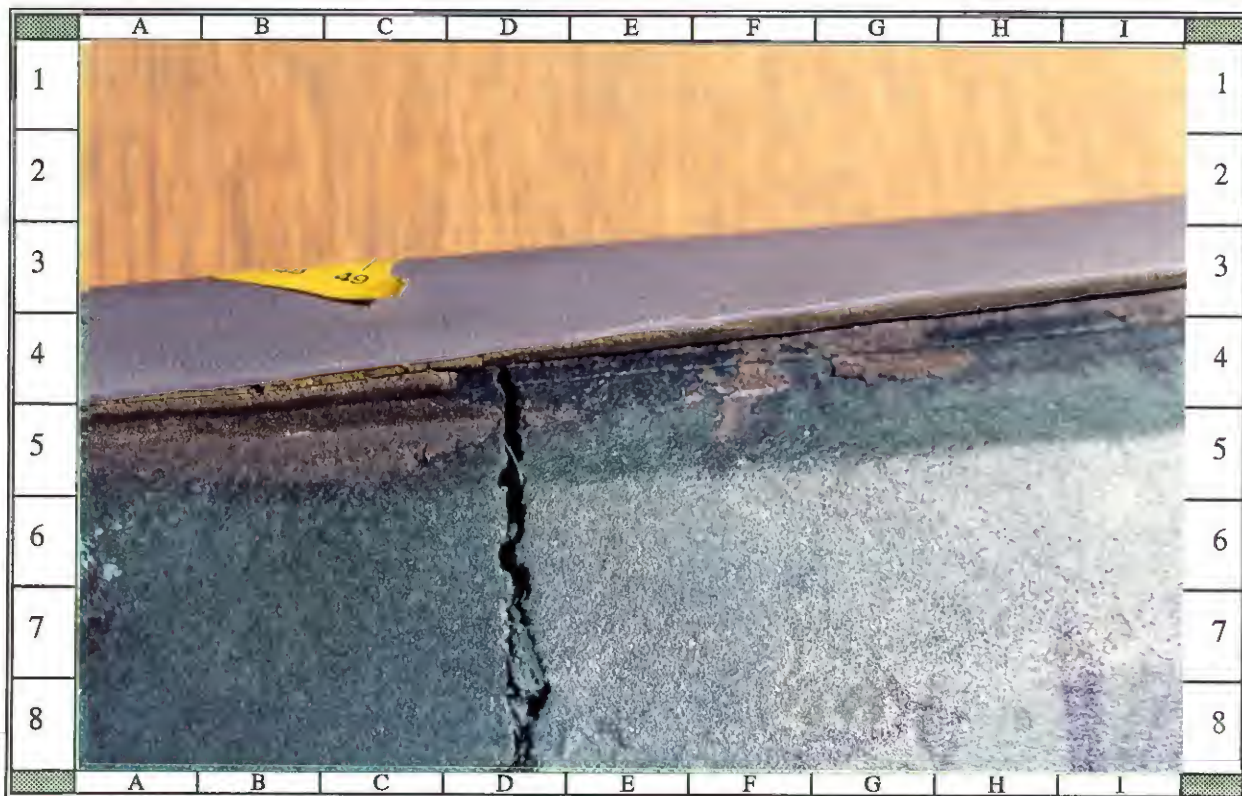
# 58: Closest-up view of Case Vehicle's right front air bag module's top cover flap showing suspected skin transfer to leading edge

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI



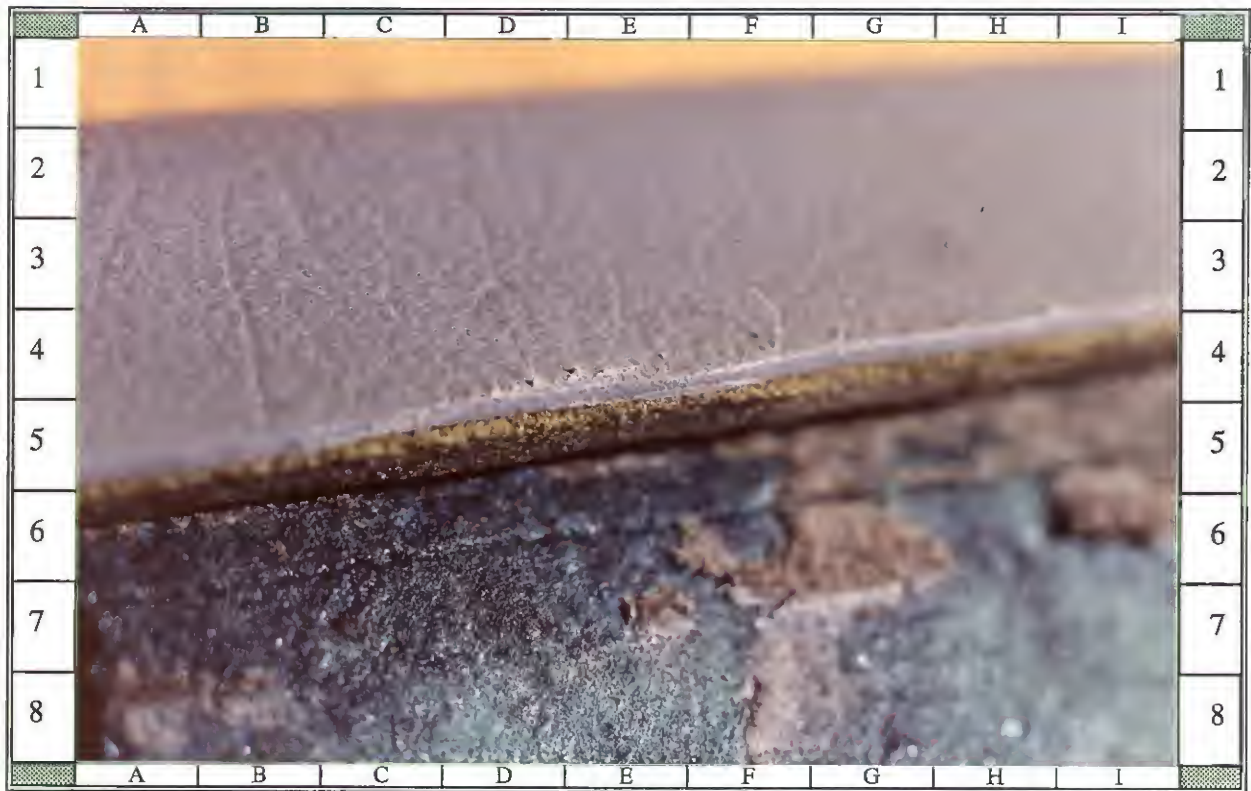


# 59: Underside of Case Vehicle's right front air bag module's top cover flap; NOTE: crack extends directly below and perpendicular to suspected occupant contact



# 60: Close-up of crack to underside of Case Vehicle's right front air bag module's top cover flap; NOTE: possible contact along lip edge right of crack





# 61: Closer-up view of possible right front occupant's contact along underside lip edge of Case Vehicle's right front air bag module's top flap cover flap



# 62: Case Vehicle's right front air bag module's top cover flap viewed from straight on showing bowing most likely from contacting right front passenger's lower face

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





# 63: Case Vehicle's center and right dash showing partially opened glovebox door;  
NOTE: can in center holder has been pushed inward



# 64: Case Vehicle's center and right dash showing glovebox ajar and inward can in  
center holder; NOTE: right dash's air vent is also pushed inward (cells F3--G4)



# 65: Close-up of Case Vehicle's right dash air vent which has been pushed inward (cells F3--F4) most likely from contact with right front passenger



# 66: Case Vehicle's adjustable right front shoulder belt upper anchorage; NOTE: anchorage adjusted to lowest position

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





# 67: Interior surface of Case Vehicle's right front door, seating area, and deployed air bag; NOTE: contact area on air bag



# 68: Interior surface of Case Vehicle's right rear door and rear seating area viewed from outside door; NOTE: third occupant in right rear seating position

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





# 69: Interior surface of Case Vehicle's left rear door and rear seating area viewed from outside door; NOTE: adjustable front head restraints



# 70: Case Vehicle's rear seating area viewed from outside left rear door; NOTE: no contact evidence to right front seatback and three-point restraints in rear

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





# 71: Vehicle #2's damaged front right with contour gauge present; NOTE: yellow tape indicates end of direct damage



# 72: Close-up of direct damage to front right of Vehicle #2; NOTE: maximum crush occurs at front right bumper corner C<sub>6</sub>

Vehicle #2: 1988 Chevrolet Corsica, 4-Door Sedan, FWD, 5-Passenger, 2.0 L (121 in<sup>3</sup>) I-4 EFI





# 73: Vehicle #2's damaged front right viewed from approximately 45 degrees left of front; NOTE: induced damage to left front fender near door



# 74: Reference line view of Vehicle #2's frontal damage from left with contour gauge present showing depth of crush; NOTE: maximum crush is at C<sub>6</sub>

Vehicle #2: 1988 Chevrolet Corsica, 4-Door Sedan, FWD, 5-Passenger, 2.0 L (121 in<sup>3</sup>) I-4 EFI





# 75: Exterior close-up of spiderweb contact on windshield from vehicle #2's driver viewed from approximately 60 degrees front of left



# 76: Vehicle #2's undamaged back and left side (i.e., behind left front fender) viewed from approximately 30 degrees left of back

Vehicle #2: 1988 Chevrolet Corsica, 4-Door Sedan, FWD, 5-Passenger, 2.0 L (121 in<sup>3</sup>) I-4 EFI





# 77: Vehicle #2's undamaged back and right side (i.e. behind right front fender) viewed from approximately 30 degrees right of back



# 78: Reference line view of Vehicle #2's frontal damage from right; NOTE: right front tire is restricted by sheet metal crush

Vehicle #2: 1988 Chevrolet Corsica, 4-Door Sedan, FWD, 5-Passenger, 2.0 L (121 in<sup>3</sup>) I-4 EFI





# 79: Vehicle #2's damaged front right viewed from approximately 45 degrees right of front with contour gauge present



# 80: Close-up of Vehicle #2's damaged front right viewed from approximately 45 degrees right of front; NOTE: yellow tape indicates end of direct damage

Vehicle #2: 1988 Chevrolet Corsica, 4-Door Sedan, FWD, 5-Passenger, 2.0 L (121 in<sup>3</sup>) I-4 EFI





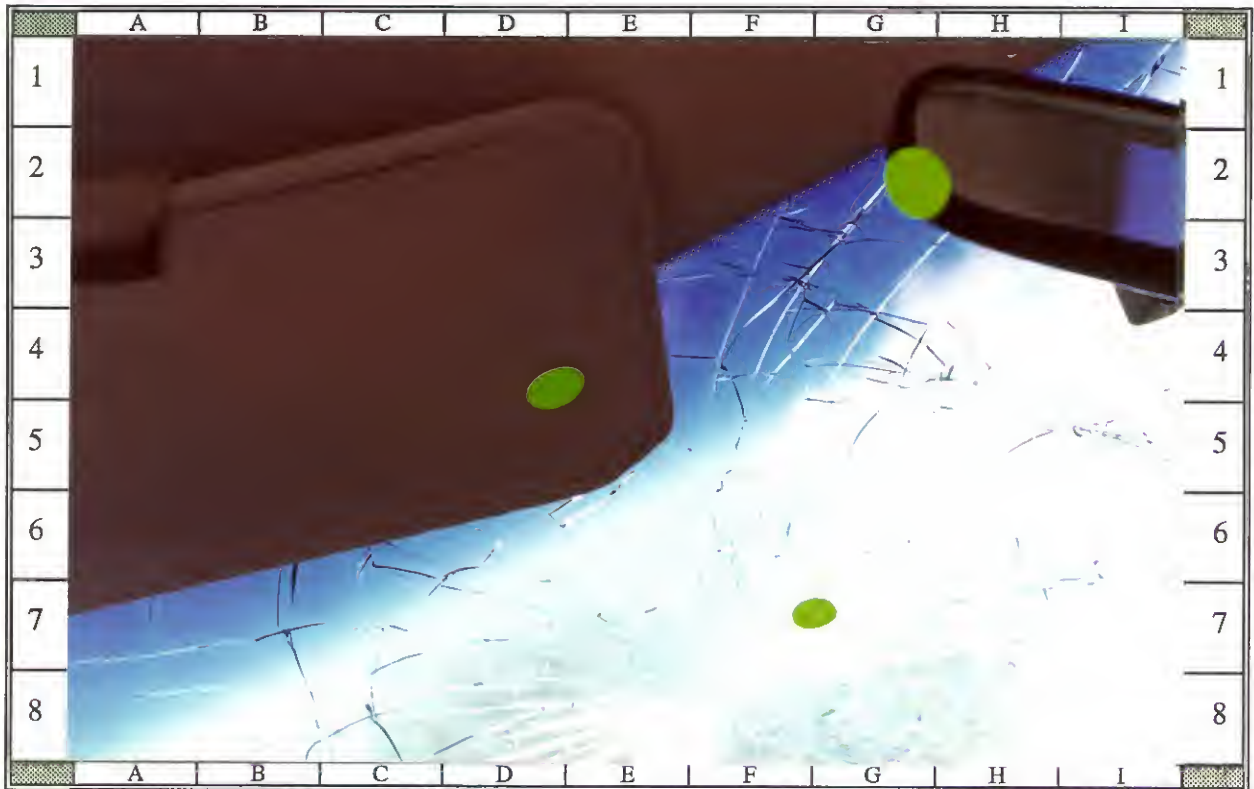
# 81: Vehicle #2's driver seating area, dash, steering column, and greenhouse; NOTE: contacts to windshield, sunvisor, mirror and left lower dash



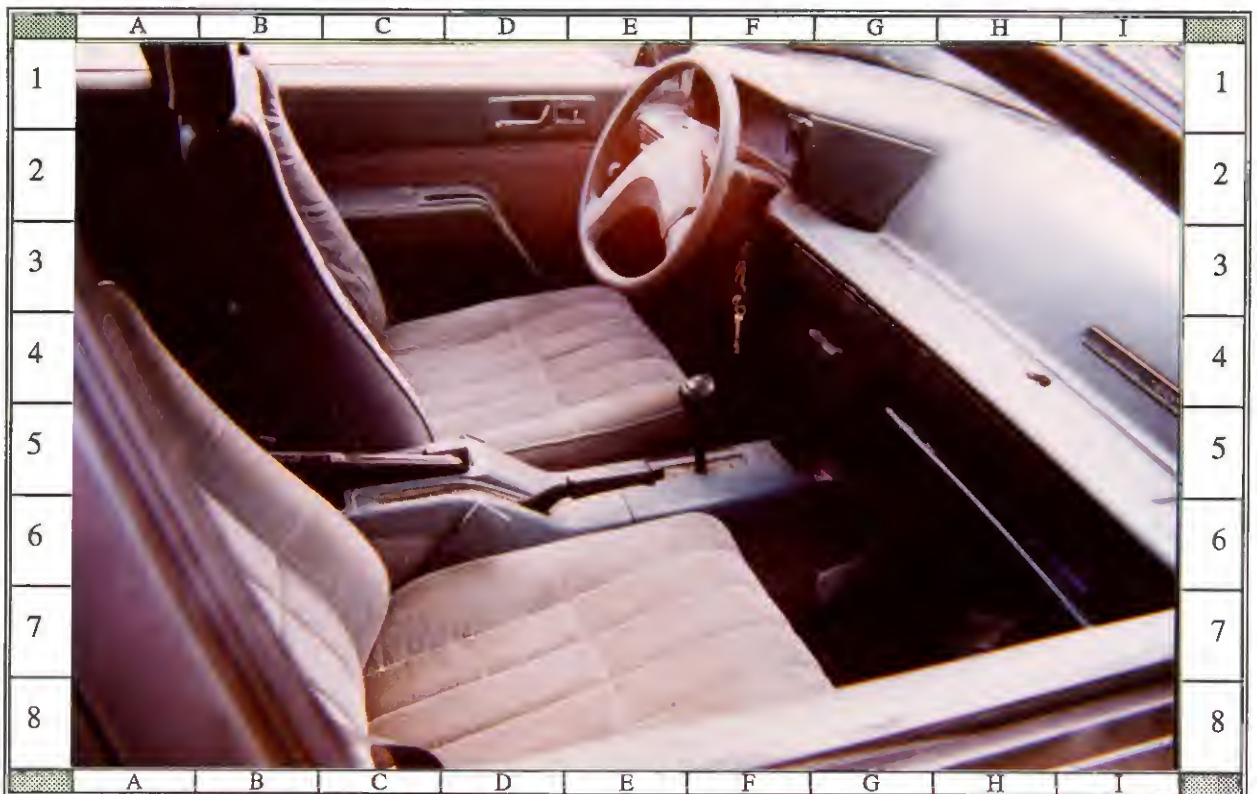
# 82: Vehicle #2's driver seating area viewed from center rear showing contacts to windshield, sunvisor, and mirror; NOTE: speedometer indicates 60 m.p.h.

Vehicle #2: 1988 Chevrolet Corsica, 4-Door Sedan, FWD, 5-Passenger, 2.0 L (121 in<sup>3</sup>) I-4 EFI





# 83: Close-up of contact evidence on Vehicle #2's windshield, sunvisor, and mirror from driver's head



# 84: On-scene view of Vehicle #2's front seating area showing driver's seat in or close to full forward position; NOTE: steering wheel appears undamaged

Vehicle #2: 1988 Chevrolet Corsica, 4-Door Sedan, FWD, 5-Passenger, 2.0 L (121 in<sup>3</sup>) I-4 EFI





# 85: Vehicle #2's front seating area viewed from outside right front passenger's door showing glovebox door which was opened post-impact; NOTE: driver's sunvisor



# 86: Vehicle #2's rear seating showing area showing front adjustable head restraints and three-point belts in front and rear outboard seating positions

Vehicle #2: 1988 Chevrolet Corsica, 4-Door Sedan, FWD, 5-Passenger, 2.0 L (121 in<sup>3</sup>) I-4 EFI

### Appendix D:

#### SELECTED PHOTOGRAPHS: CASE VEHICLE'S SAFETY BELTS

A total of forty additional color copies of photographs are presented and referenced as Photograph #87 through Photograph #126. All of these photographs were taken by the [REDACTED].





# 87: Case Vehicle's driver side safety belt (i.e., 1 of 7) showing side toward a restrained driver and left floor anchorage attachment



# 88: Case Vehicle's driver side safety belt (i.e., 2 of 7) showing side toward a restrained driver; NOTE: no evidence of loading

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI



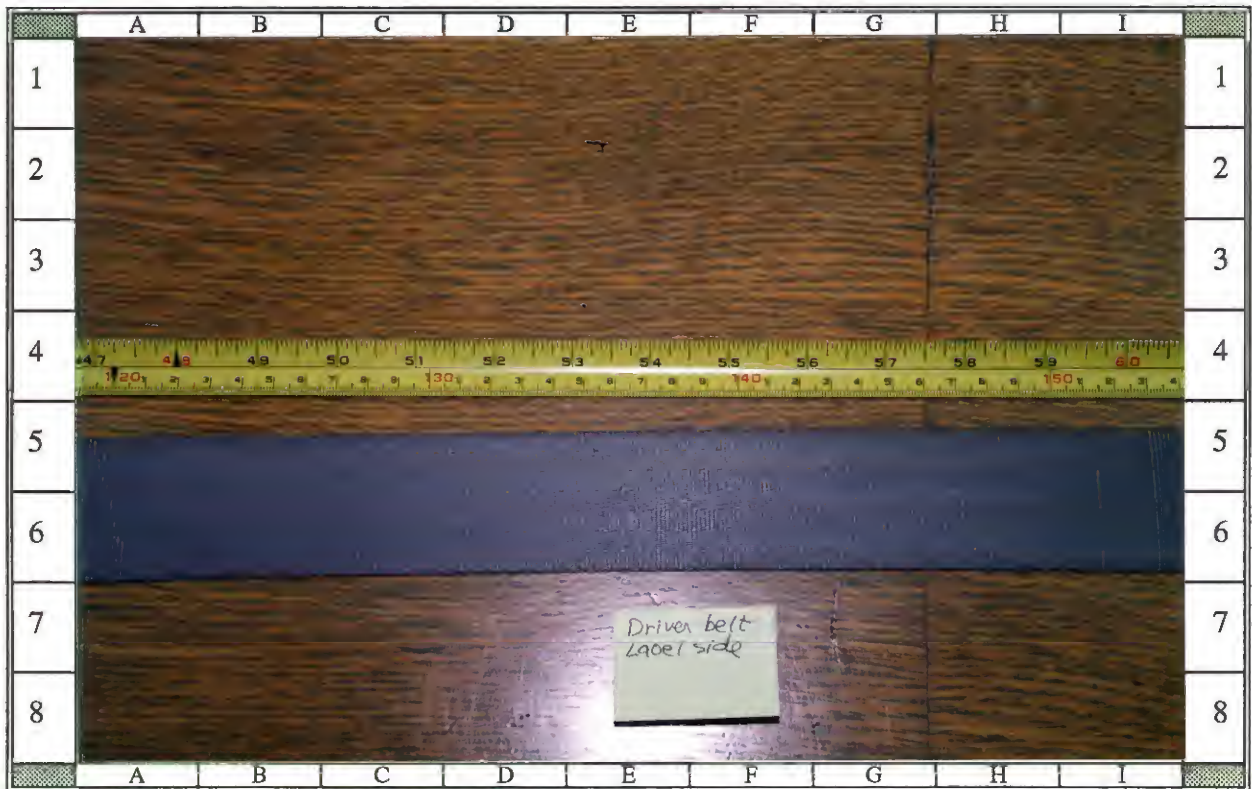


# 89: Case Vehicle's driver side safety belt (i.e., 3 of 7) showing side toward a restrained driver; NOTE: no evidence of loading



# 90: Case Vehicle's driver side safety belt (i.e., 4 of 7) showing side toward a restrained driver; NOTE: no evidence of loading





# 91: Case Vehicle's driver side safety belt (i.e., 5 of 7) showing side toward a restrained driver; NOTE: no evidence of loading



# 92: Case Vehicle's driver side safety belt (i.e., 6 of 7) showing side toward a restrained driver; NOTE: no evidence of loading

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





# 93: Case Vehicle's driver side safety belt (i.e., 7 of 7) showing side toward a restrained driver; NOTE: no evidence of loading



# 94: Case Vehicle's driver side safety belt (i.e., 1 of 7) showing side away from a restrained driver and left floor anchorage attachment





# 95: Case Vehicle's driver side safety belt (i.e., 2 of 7) showing side away from a restrained driver; NOTE: grease smears but no evidence of loading



# 96: Case Vehicle's driver side safety belt (i.e., 3 of 7) showing side away from a restrained driver; NOTE: grease smears but no evidence of loading

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





# 97: Case Vehicle's driver side safety belt (i.e., 4 of 7) showing side away from a restrained driver; NOTE: no evidence of loading

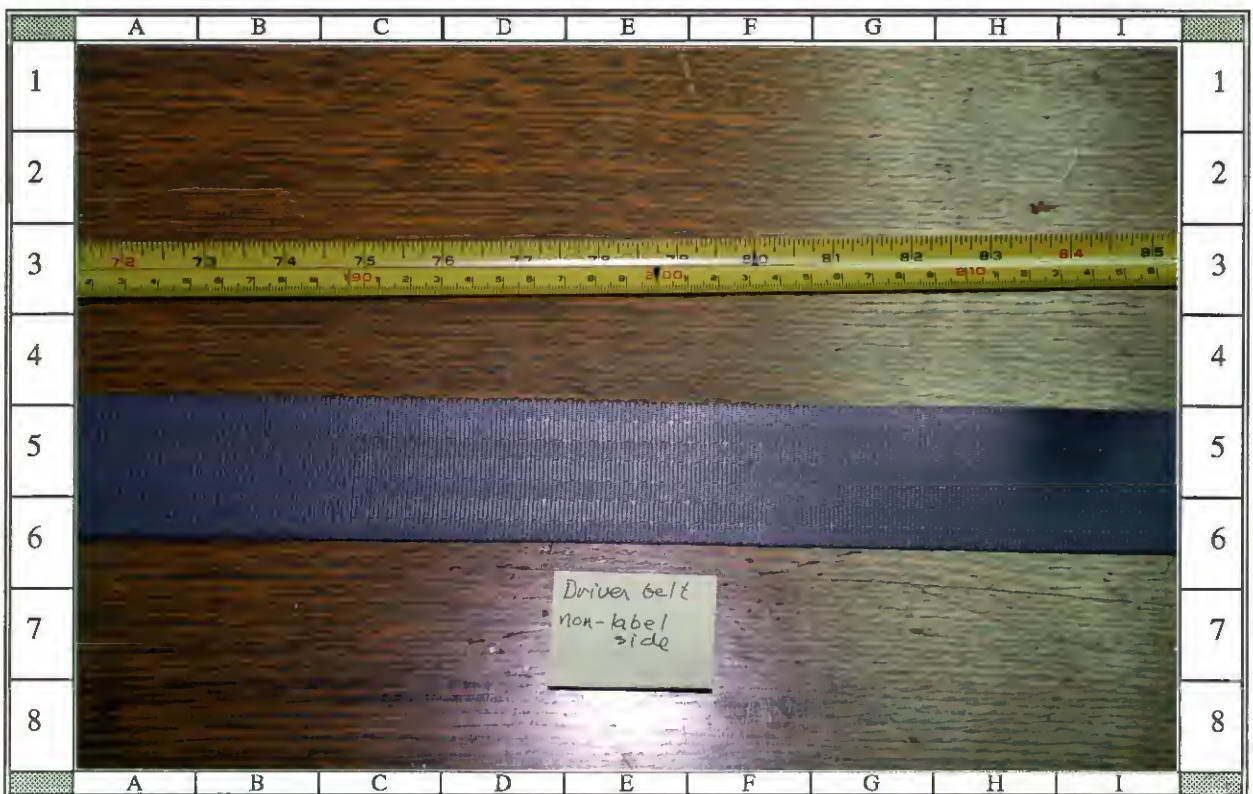


# 98: Case Vehicle's driver side safety belt (i.e., 5 of 7) showing side away from a restrained driver; NOTE: no evidence of loading





# 99: Case Vehicle's driver side safety belt (i.e., 6 of 7) showing side away from a restrained driver; NOTE: no evidence of loading



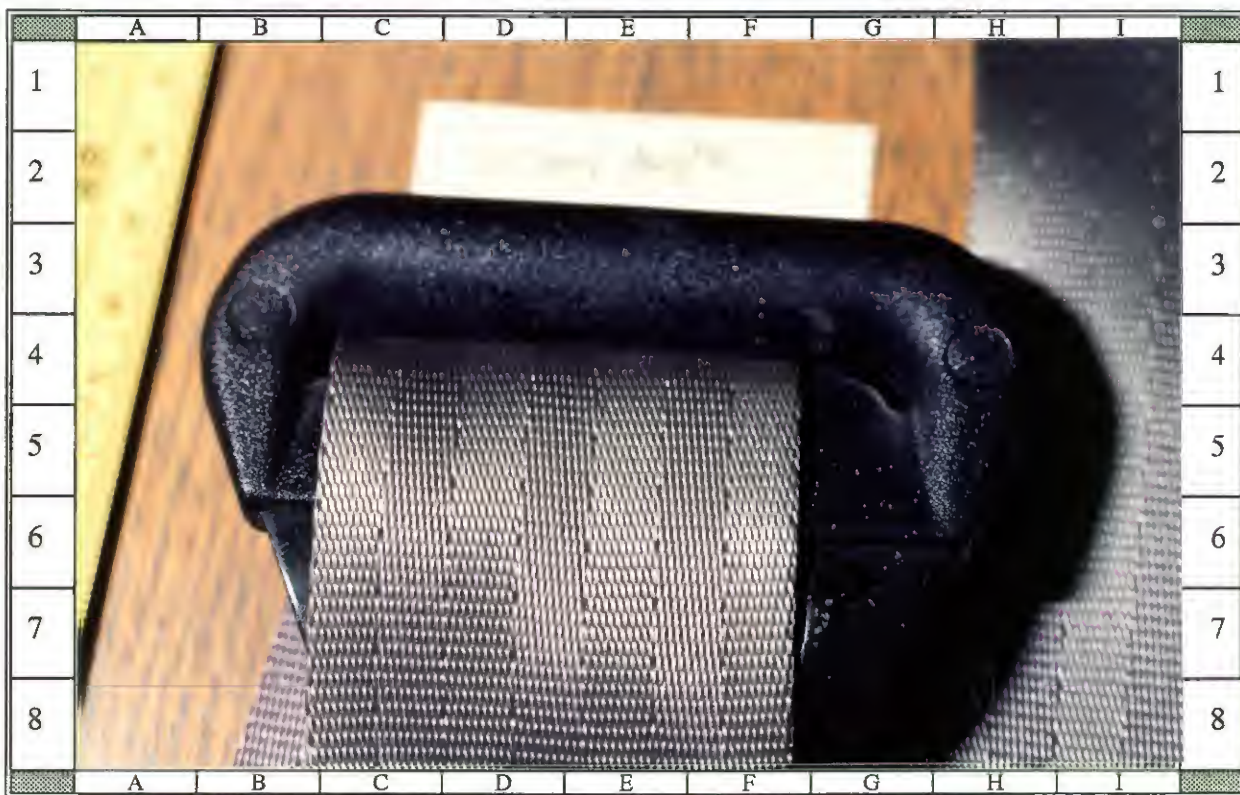
#100: Case Vehicle's driver side safety belt (i.e., 7 of 7) showing side away from a restrained driver; NOTE: no evidence of loading

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





#101: Case Vehicle's driver side safety belt showing medial side of "D" ring and safety belt passing through "D" right; NOTE: no evidence of loading



#102: Case Vehicle's driver side safety belt showing lateral side of "D" ring and safety belt passing through "D" right; NOTE: no evidence of loading





#103: Latch plate from Case Vehicle's driver side safety belt showing normal evidence of usage but no evidence of loading



#104: Latch plate adjuster from Case Vehicle's driver side safety belt showing adjuster's side that would be toward a restrained driver; NOTE: no evidence of loading



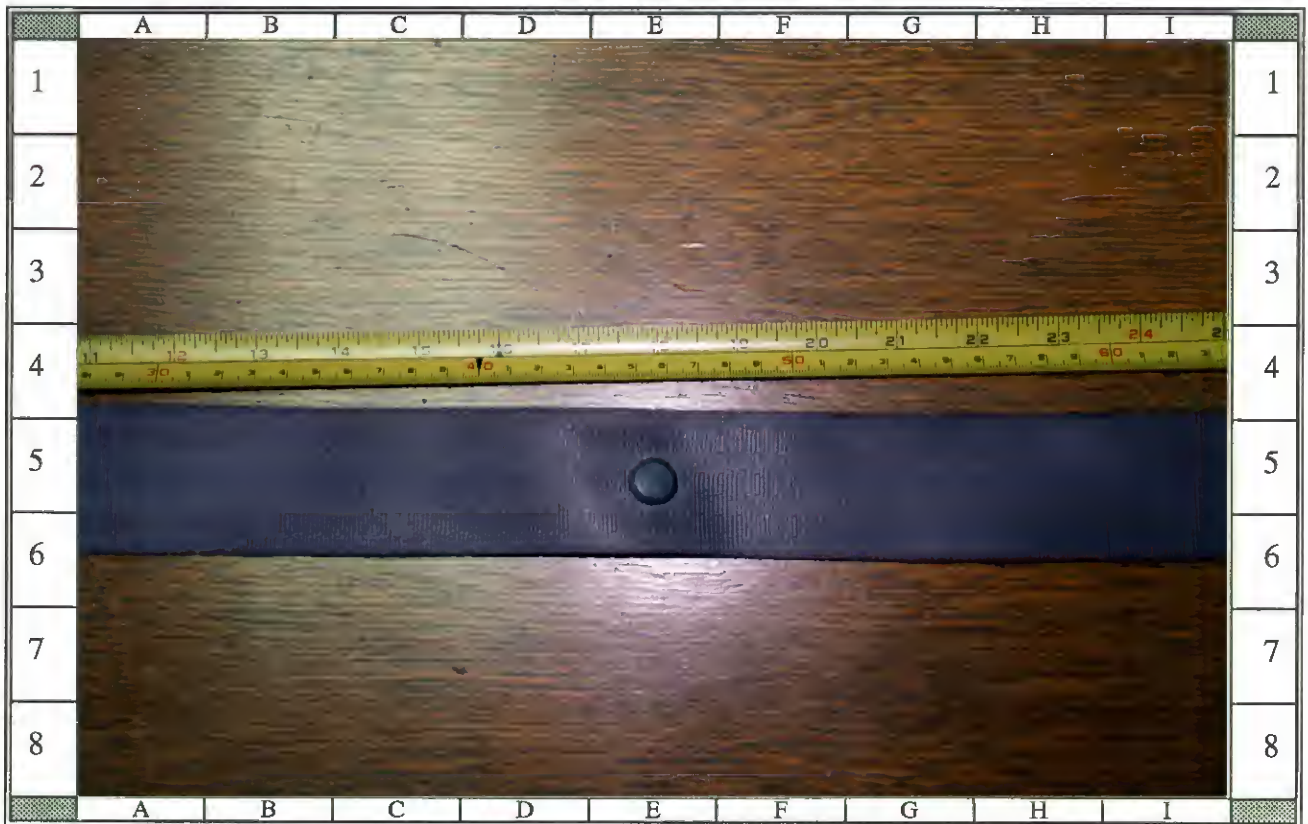


#105: Latch plate adjuster from Case Vehicle's driver side safety belt showing adjuster's side that would be away a restrained driver; NOTE: no evidence of loading

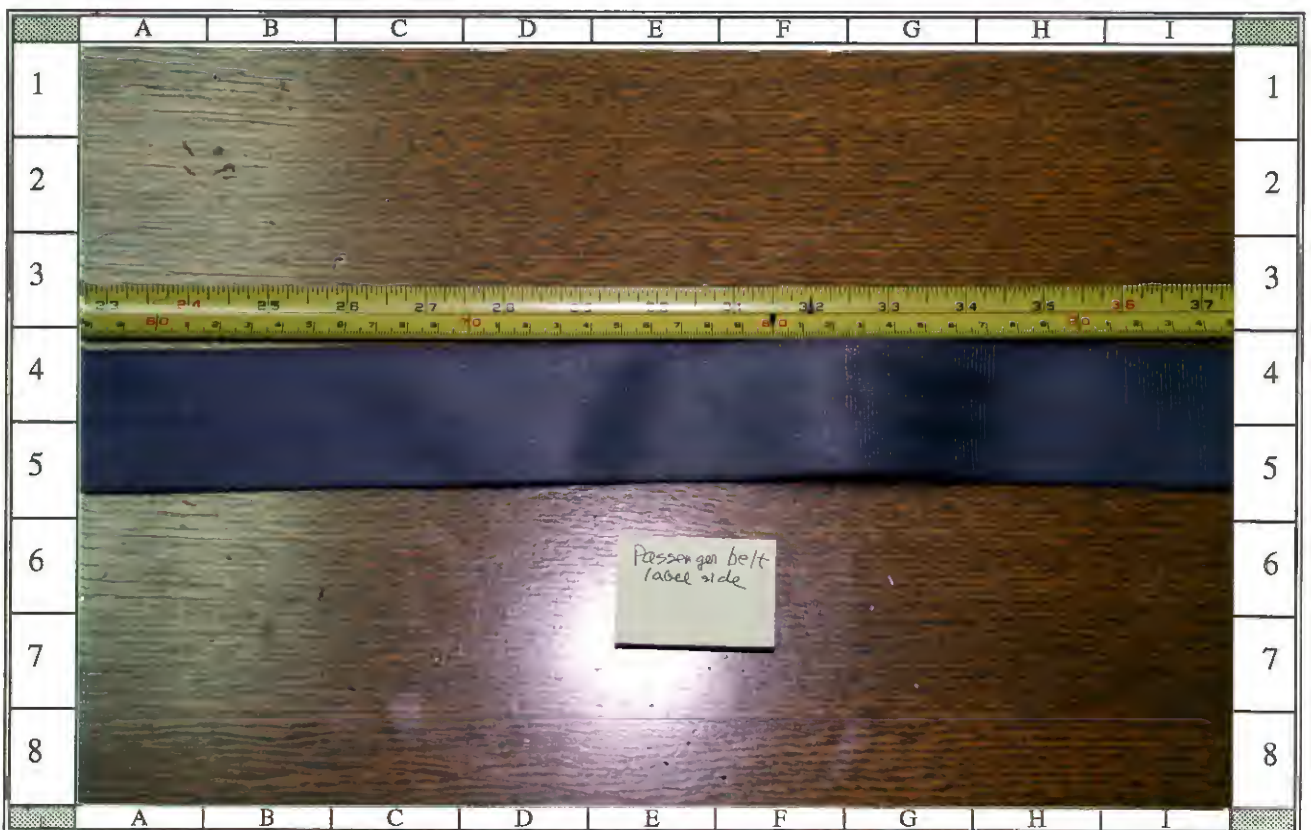


#106: Case Vehicle's right front safety belt (i.e., 1 of 7) showing side toward a restrained passenger and right floor anchorage attachment





#107: Case Vehicle's right front safety belt (i.e., 2 of 7) showing side toward a restrained passenger; NOTE: no evidence of loading



#108: Case Vehicle's right front safety belt (i.e., 3 of 7) showing side toward a restrained passenger; NOTE: no evidence of loading



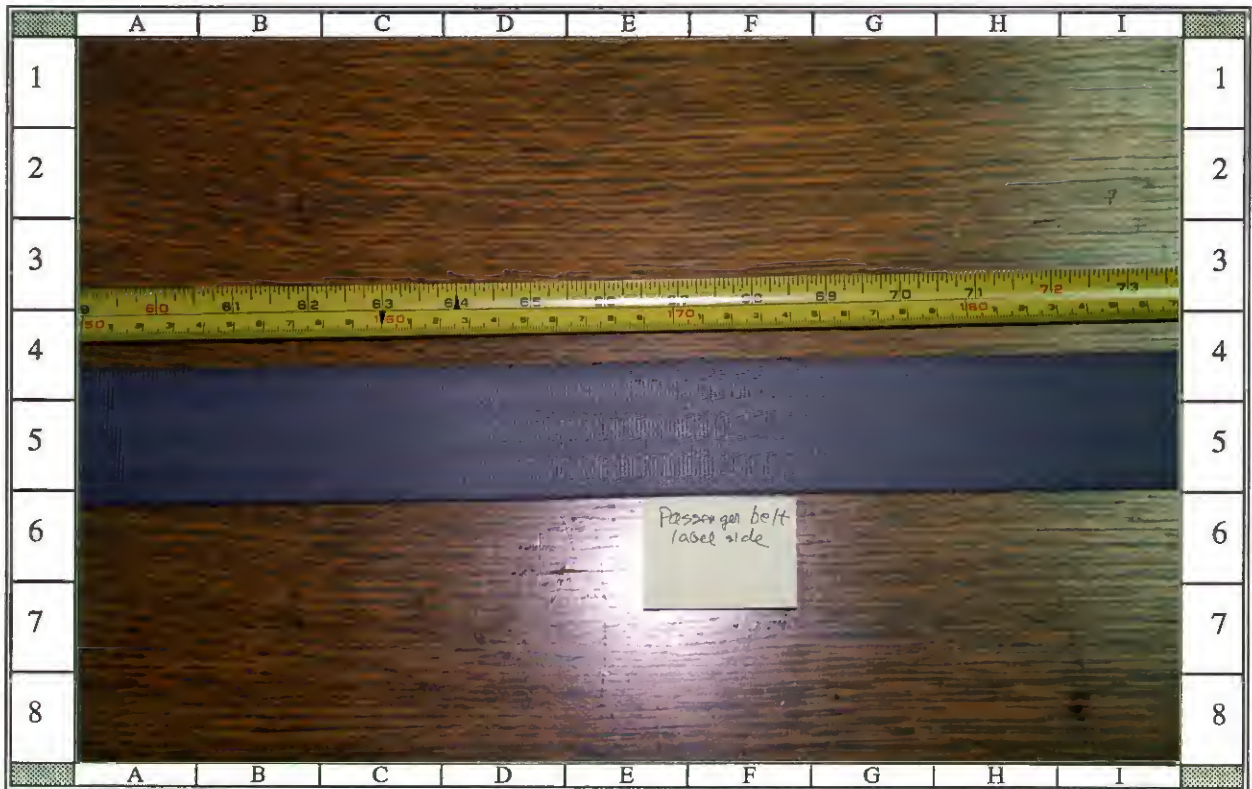


#109: Case Vehicle's right front safety belt (i.e., 4 of 7) showing side toward a restrained passenger; NOTE: no evidence of loading



#110: Case Vehicle's right front safety belt (i.e., 5 of 7) showing side toward a restrained passenger; NOTE: possible greasy prints but no evidence of loading





#111: Case Vehicle's right front safety belt (i.e., 6 of 7) showing side toward a restrained passenger; NOTE: no evidence of loading



#112: Case Vehicle's right front safety belt (i.e., 7 of 7) showing side toward a restrained passenger; NOTE: no evidence of loading





#113: Case Vehicle's right front safety belt (i.e., 1 of 7) showing side away from a restrained passenger and right floor anchorage attachment



#114: Close-up of imprinted CAUTION sticker on Case Vehicle's right front safety belt overlapping 1st and 2nd 7ths of belt that would be toward a restrained passenger





#115: Case Vehicle's right front safety belt (i.e., 2 of 7) showing side away from a restrained passenger; NOTE: no evidence of loading



#116: Case Vehicle's right front safety belt (i.e., 3 of 7) showing side away from a restrained passenger; NOTE: no evidence of loading

Case Vehicle: 1995 Chevrolet Lumina, 4-Door Sedan, FWD, 6-Passenger, 3.1 L (191 in<sup>3</sup>) V-6 MPFI





#117: Case Vehicle's right front safety belt (i.e., 4 of 7) showing side away from a restrained passenger; NOTE: grease smears but no evidence of loading



#118: Case Vehicle's right front safety belt (i.e., 5 of 7) showing side away from a restrained passenger; NOTE: no evidence of loading





#119: Case Vehicle's right front safety belt (i.e., 6 of 7) showing side away from a restrained passenger; NOTE: no evidence of loading



#120: Case Vehicle's right front safety belt (i.e., 7 of 7) showing side away from a restrained passenger; NOTE: no evidence of loading





#121: Case Vehicle’s floor mounted buckles for center and right front safety belts showing evidence of interaction with right front seat



#122: Close-up of Case Vehicle’s floor mounted buckle for right front safety belt showing evidence of normal usage but no evidence of loading on mechanism



#123: Latch plate from Case Vehicle's right front safety belt; NOTE: no evidence of loading on latch plate

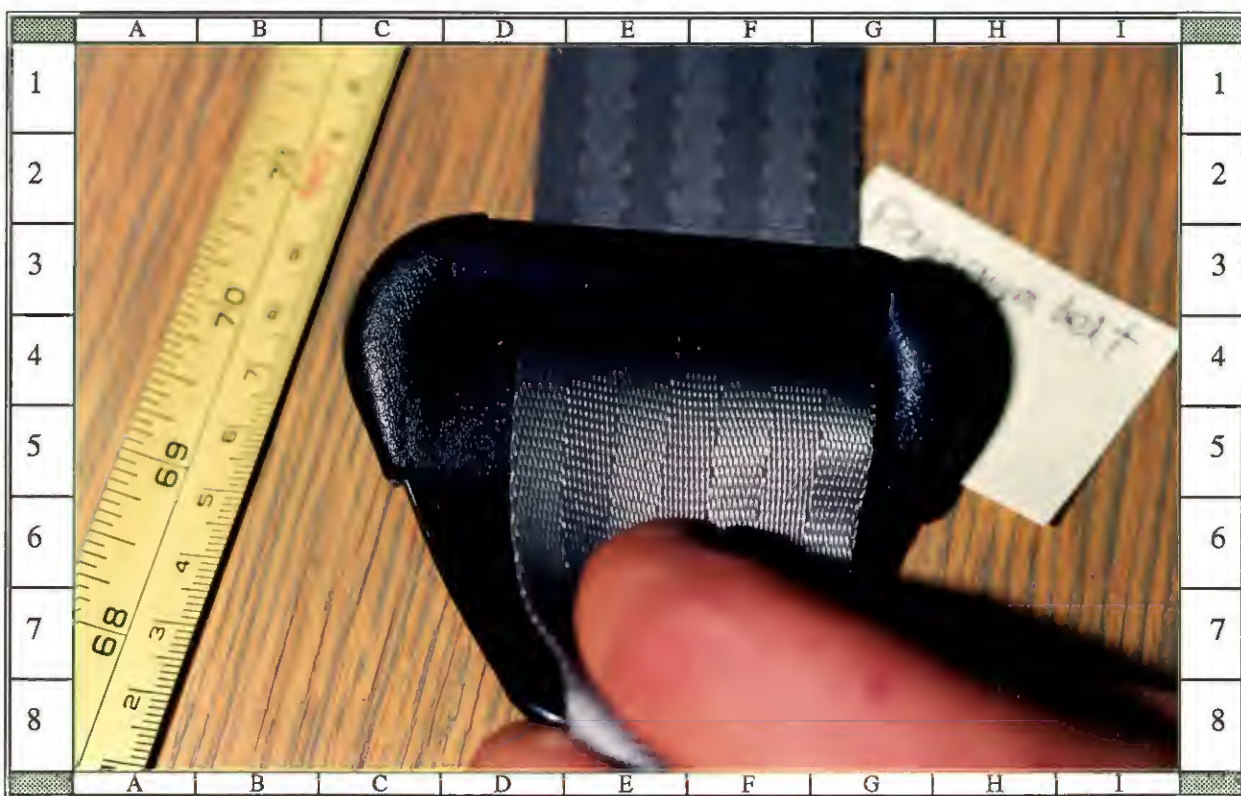


#124: Latch plate adjuster from Case Vehicle's right front safety belt showing adjuster's side that would be toward a restrained passenger; NOTE: no evidence of loading





#125: Latch plate adjuster from Case Vehicle's right front safety belt showing adjuster's side that would be away a restrained passenger; NOTE: no evidence of loading



#126: Case Vehicle's right front safety belt showing medial side of "D" ring and safety belt passing through "D" right; NOTE: no evidence of loading

TRANSPORTATION RESEARCH CENTER

Indiana University  
Bloomington, Indiana 47403-1599

**ON-SITE AIR BAG INVESTIGATION**

NASS CDS FORMS AND MEDICAL RECORDS

CASE NO. - 96-18  
FLEET - PRIVATE VEHICLE  
LOCATION - KANSAS  
ACCIDENT DATE - [REDACTED] 1996

Submitted By:

[REDACTED]  
Senior Staff Associate  
and  
[REDACTED]  
Associate Scientist

[REDACTED] 1996

Revised Submission:

[REDACTED] 1998

Contract Number: DTNH22-94-D-17058

Prepared for:

U.S. Department of Transportation  
National Highway Traffic Safety Administration  
National Center for Statistics and Analysis  
Washington, D.C. 20590-0003



**POLICE ACCIDENT REPORT**

STATE OF KANSAS  
MOTOR VEHICLE ACCIDENT REPORT  
DOT FORM NO. 850  
Rev. 1-95

- ☐ Hit & Run Accident
- ☐ KDOT Property Damage
- ☐ KDOT Construction Zone

Milepost	COUNTY	ON Road	Speed Limit	CITY	Photos By	Local Case Number	Page of																																					
100	FT	N	55				113																																					
Distance	Ft	Dir.	FROM	AT Road	Investigating Dept.	Investigating OFFICER/BADGE Number	Reviewed By																																					
100	FT	N	FROM	AT Road																																								
COLLISION DIAGRAM (Show Unit Movements, Roads)				Describe pre-crash movement or action and direction of vehicles and pedestrians by traffic unit number.																																								
Object damaged and nature of damage (Show location in diagram)				Name and Address of object owner																																								
ON Road				Cntl Sec.	Sec. Milepost	AT Road	Distance																																					
County				City Code	Agency Code	Distance	Reference Road 1																																					
Unit				Driver	Ped	NAME (Last, First and Initial)	Phone																																					
Driver/Ped ADDRESS (Number, Street, City, State, Zip Code)				STATE	LICENSE PLATE #	YEAR	Removed By:																																					
DRIVER'S LICENSE STATE and NUMBER				CDL?	DATE OF BIRTH	SEX	VEHICLE IDENTIFICATION NUMBER																																					
Registered OWNER FULL NAME ("Same" if Driver)				Phone	Work	Home	TOTAL occupants in this vehicle																																					
OWNER Address ("Same" if Driver)				Special Data Area	Direction of Travel	Policy Number	Insurance Company																																					
Special Conditions for unit above:																																												
Unit								Driver	Ped	NAME (Last, First and Initial)	Phone	Work	Home	Color	YEAR	MAKE	MODEL & BODY STYLE	MC CCs																										
Driver/Ped ADDRESS (Number, Street, City, State, Zip Code)								STATE	LICENSE PLATE #	YEAR	Removed By:																																	
DRIVER'S LICENSE STATE and NUMBER								CDL?	DATE OF BIRTH	SEX	VEHICLE IDENTIFICATION NUMBER					Odometer																												
Registered OWNER FULL NAME ("Same" if Driver)								Phone	Work	Home	TOTAL occupants in this vehicle	Fire?	Insurance Company																															
OWNER Address ("Same" if Driver)								Special Data Area	Direction of Travel	Policy Number																																		
Special Conditions for unit above:																																												
Unit								Driver	Ped	NAME (Last, First and Initial)	Phone	Work	Home	Color	YEAR	MAKE	MODEL & BODY STYLE	MC CCs																										
Driver/Ped ADDRESS (Number, Street, City, State, Zip Code)								STATE	LICENSE PLATE #	YEAR	Removed By:																																	
DRIVER'S LICENSE STATE and NUMBER								CDL?	DATE OF BIRTH	SEX	VEHICLE IDENTIFICATION NUMBER					Odometer																												
Registered OWNER FULL NAME ("Same" if Driver)								Phone	Work	Home	TOTAL occupants in this vehicle	Fire?	Insurance Company																															
OWNER Address ("Same" if Driver)								Special Data Area	Direction of Travel	Policy Number																																		
Special Conditions for unit above:																																												
TRAF UNIT	SEAT TYPE	Last NAME	First Name	Initial	ADDRESS (Number, Street, City, State, Zip)				SEX	AGE	S.E. USE	EJECT TRAP	INJ SEV	EMS UNIT																														
1	01								F	27	S	N	I	A																														
1	03								m	5	P	N	F	B																														
1	06								m	3	C	N	N	-																														
2	01								F	32	S	N	I	A																														
E Unit INJURED TAKEN By:															E Unit INJURED TAKEN By:															E Unit INJURED TAKEN By:														
S A INJURED TAKEN To:															S B INJURED TAKEN To:															S C INJURED TAKEN To:														



SPECIAL DATA (State Use Only)				USE CODE "99" FOR UNKNOWN				
Dr/Pd #	Violation Charged	Citation No.	Dr/Pd #	Violation Charged	Citation No.	Dr/Pd #	Violation Charged	Citation No.
OFFICER'S OPINIONS OF APPARENT CONTRIBUTING CIRCUMSTANCES (Factor Type-Unit Number/Specific Factor) Enter in order all codes that apply.								
01 08 01 16 02 19 - - - - -								
<b>0.1 LIGHT</b> 01 Daylight 02 Dawn 03 Dusk 04 Dark: street lights on 05 Dark: no street lights		<b>TRAFFIC CONTROLS</b> O/A (On/At Road) Type Present OK/NF (OK/Non-functional)		<b>0.3 ACCIDENT CLASS</b> 00 Other non-collision 01 Overturned COLLISION WITH: 02 Pedestrian 03 Other motor vehicle* 04 Parked motor vehicle 05 Railway train 06 Pedalcycle 07 Animal(specify) _____ 08 Fixed object** 09 Other object _____		<b>0.1 * COLLISION WITH OTHER MOTOR-VEH.</b> 01 Head on 02 Rear end 03 Angle 04 Sideswipe-opposing 05 Sideswipe-overtaking 06 Backed into 88 Other _____		
<b>0.0 WEATHER</b> 00 No adverse conditions 01 Rain 08 Freezing rain 02 Sleet 14 Rain & fog 03 Snow 16 Rain & wind 04 Fog 24 Sleet & fog 05 Smoke 36 Snow & winds 06 Strong winds 07 Blowing dust, sand, etc. 88 Other _____		<b>ROAD CHARACTER</b> ON 01 Straight and level 02 Straight on grade 03 Straight at hillcrest AT 04 Curved and level 05 Curved on grade 06 Curved at hillcrest 88 Other _____		<b>1.3 ACCIDENT LOCATION</b> <b>ON ROADWAY:</b> 11 Non-intersection 12 Intersection 13 Intersection-related 14 Parking lot or driveway access 15 Interchange area 16 On crossover <b>OFF ROADWAY:</b> 21 Roadside (including shoulder) 22 Median 23 Parking lot, rest area trafficway 88 Other _____		<b>** FIXED OBJECT TYPE</b> 01 Bridge structure 02 Bridge rail 03 Crash cushion (barrels) 04 Divider, median barrier 05 Overhead sign support 06 Utility pole, devices 07 Other post or pole 08 Building 16 Mailbox 09 Guardrail 17 Ditch 10 Sign post 18 Embankment 11 Culvert 19 Wall 12 Curb 20 Tree 13 Fence 21 RR crossing fixtures 14 Hydrant 15 Barnacle 88 Other _____		
<b>ON 0.3 SURFACE TYPE</b> 01 Concrete 02 Blacktop AT 03 Gravel 04 Dirt 05 Brick 88 Other _____		<b>ON 0.5 CONST./MAINT. ZONE</b> 00 None apply AT 01 Construction zone 02 Maintenance zone 03 Utility zone		<b>0.0 ROAD SPECIAL FEATURES</b> Enter any visible identifier; refer by code Identify up to three 00 None 04 Railroad crossing Code Ident: 01 Bridge 05 Interchange 02 Bridge overhead 06 Ramp 03 Railroad bridge 88 Other _____				
<b>ON 0.1 VEHICLE MANEUVER BEFORE CRASH</b> 01 Straight/following road 02 Left turn 03 Right turn 04 U turn 05 Overtaking (passing) 06 Changing lanes 07 Avoiding maneuver 08 Merging 09 Parking 10 Backing 11 Stopped awaiting turn 12 Stopped in traffic 13 Illegally parked 14 Disabled in roadway 15 Slowing or stopping 88 Other _____		<b>DAMAGE LOCATION AREA--Vehicle 1</b>  <input type="checkbox"/> Top <input checked="" type="checkbox"/> Windshld <input type="checkbox"/> Windows <input checked="" type="checkbox"/> Under <input type="checkbox"/> Overturn Trailer? <input type="checkbox"/> Present <input type="checkbox"/> Damaged		<b>0.1 VEHICLE BODY TYPE</b> Bus Capacity 01 Automobile 10 Single truck over 4-tires 02 Motorcycle 11 Truck and trailer(s) 03 Motorscooter or Moped 12 Tractor-trailer(s) 04 Van 13 Cross country bus 05 Pickup truck 14 School bus 06 Single truck 4-tires 15 Transit bus 07 Camper or RV 25 Train 08 Farm equipment 88 Other _____ 09 All terrain vehicle(ATV)		<b>PEDESTRIAN ACTION</b> 01 Entering or crossing road 02 Walking or riding on road 03 Approaching, leaving, or working on vehicle 04 Working (not on vehicle) 05 Playing or standing 06 Approaching or leaving bus 07 In parked vehicle 88 Other _____		
<b>0.3 VEHICLE DAMAGE</b> 00 None/None known 01 Damage (minor) 02 Functional 03 Disabling 04 Destroyed 88 Other _____		<b>DAMAGE LOCATION AREA--Vehicle 2</b>  <input type="checkbox"/> Top <input checked="" type="checkbox"/> Windshld <input type="checkbox"/> Windows <input checked="" type="checkbox"/> Under <input type="checkbox"/> Overturn Trailer? <input type="checkbox"/> Present <input type="checkbox"/> Damaged		<b>PEDESTRIAN LOCATION BEFORE IMPACT--IN INTERSECTION:</b> 01 In crosswalk or bikeway 02 Not in crosswalk or bikeway 03 In intersection without crosswalk or bikeway <b>NOT IN INTERSECTION</b> 11 In available crosswalk or bikeway 12 Not in available crosswalk or bikeway 13 In area without crosswalk or bikeway <b>25 NOT IN ROADWAY</b>		<b>PED OBEDIENCE TO TRAF SIG</b> 00 No pedestrian signal 01 Obeyed pedestrian signal 02 Disobeyed ped signal 03 Ped signal malfunction 04 Not applicable		
<b>0.1 DR. LIC. COMPLY</b> (Code each driver) 00 Not licensed 01 Valid license 02 Invalid license		<b>0.0 RESTRICT. COMPLY</b> (Code each driver) 00 No restrictions 01 Complied with 02 Did not comply		<b>SUBSTANCE USE</b> AP - Alcohol Present AC - Alcohol Contributed DP - Illegal Drug Present DC - Illegal Drug Contributed MP - Medication Present MC - Medication Contributed		<b>DRIVER/PED IMPAIRMENT TEST</b> TR Alcohol or drug Test Refused PT Positive preliminary Test RP Test given, Results Pending 0. ← B.A.C. → 0.		

## INVESTIGATIVE - FATALITY REPORT

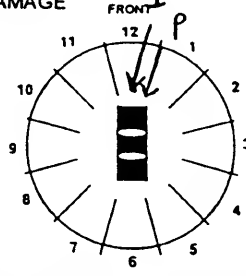
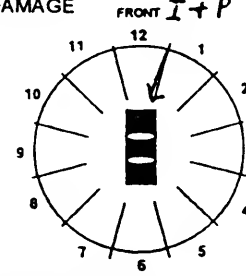
COUNTY	ON Road	CITY	DATE of Accident	<input checked="" type="checkbox"/> Fatal, narrative & diagram on fatal accident (required by State)	Page of
FR			96	<input type="checkbox"/> Investigative Report	2 / 3
STATE USE ONLY		INVESTIGATIVE DEPT.	TIME Occurred	Day	Invest. OFFICER/BADGE No. Local Case Number

D2 STATEMENT: I was going west on the right side of the road (Rd). I was as close as possible to the right side of the road. I don't drive the road very often. As I came around the curve I saw the car (V1) coming at me on my side of the road. I tried to get to the other side of the road to miss it (V1).

D1 STATEMENT: I saw her and turned to the left. I knew we were going to hit. The next thing I hit my head and smelled smoke.

(See attached narrative for officer's information)

## FATALITY DATA

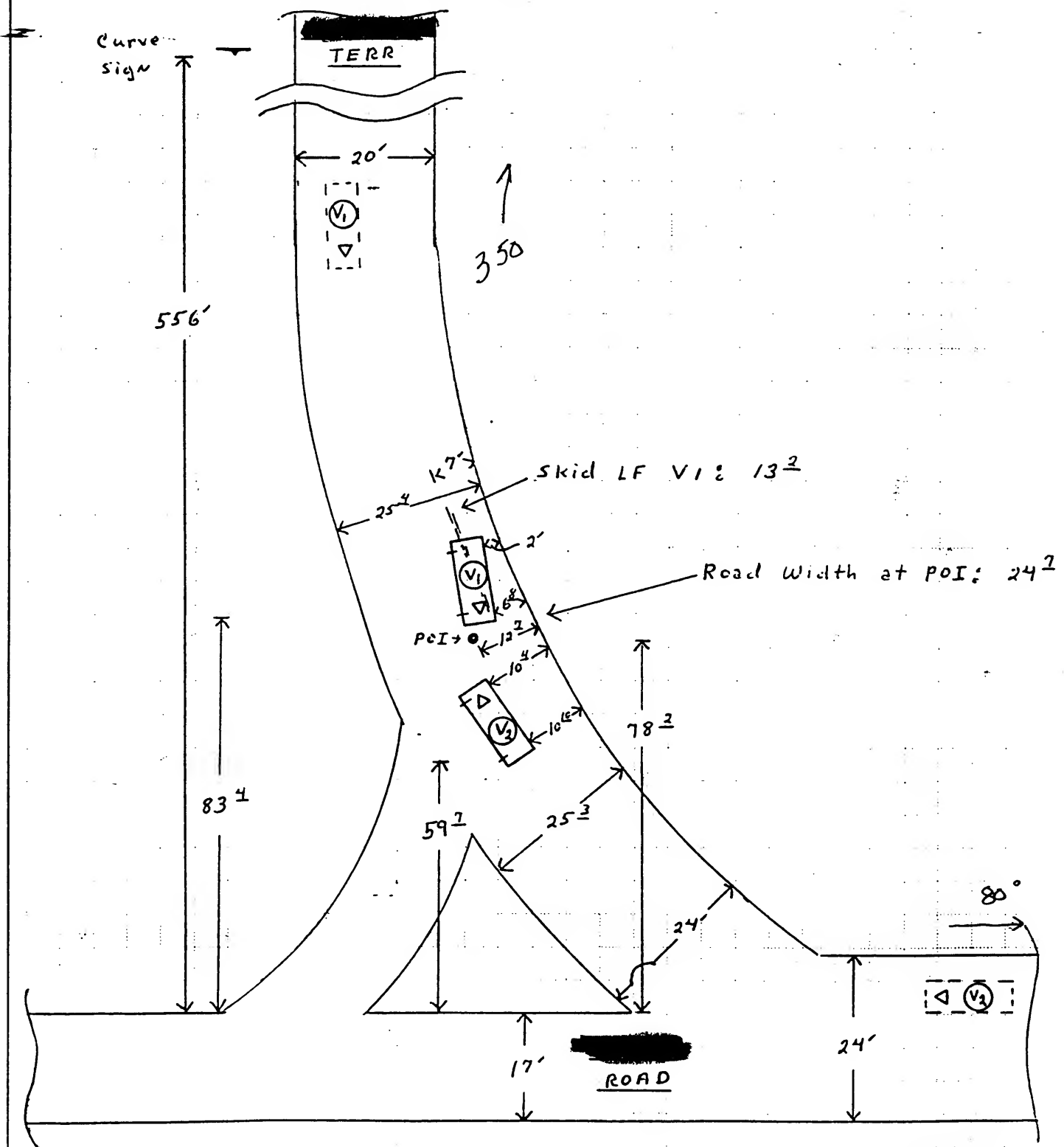
TIME EMS NOTIFIED 1653	EXTRICATION WAS REQUIRED FOR THE FOLLOWING PERSONS NONE	00 SPECIAL JURISDICTION 01 Not Special 02 National Park Service 03 Military 04 Indian Reservation 05 College/University Campus 06 Other Federal properties 07 Other 08 Other 09 Unknown	VEHICLE 1 DAMAGE FRONT I P	VEHICLE 2 DAMAGE FRONT I + P
TIME EMS ARRIVED 1704				
TIME EMS ARRIVED AT HOSPITAL 1723			<input checked="" type="checkbox"/> Undercarriage <input type="checkbox"/> No Damage	<input checked="" type="checkbox"/> Undercarriage <input type="checkbox"/> No Damage
IMPACT POINTS: Show initial impact point by arrow and label "I". Show principal impact point by arrow and label "P".			20 Estimated Speed, MPH	30 Estimated Speed, MPH



## COLLISION DIAGRAM

Draw scene as observed. Refer to vehicles, drivers, and pedestrians by numbers assigned in this report.

- SHOW (1) Outline of street and access points and identify specifically by number.  
 (2) Paths of units prior to and after impact, skidmarks, and point of impact (POI).  
 (3) Location of signs, traffic controls, and reference points.  
 (4) Location of other property hit or damaged (trees, signs, etc.).  
 (5) Specific features at location (bridge, overpass, culvert, railroad crossing, etc.).  
 (6) Location of temporary highway conditions.  
 (7) All measurements to locate the accident relative to specific, fixed, and identifiable points.

NOT DRAWN  
TO SCALE

CASE NUMBER: [REDACTED]  
VICTIM: [REDACTED]  
DATE OF OFFENSE: [REDACTED]-96

SUPPLEMENT REPORT

AT [REDACTED] HRS., [REDACTED]-96, I WAS DISPATCHED TO THE INTERSECTION OF [REDACTED] ROAD AND [REDACTED] TERRACE, NORTHWEST OF [REDACTED] IN [REDACTED] COUNTY, KANSAS, IN RESPONSE TO A 911 REPORT OF AN INJURY ACCIDENT AT THAT LOCATION. [REDACTED] UNDERSHERIFF [REDACTED] AND DEPUTY [REDACTED] ALSO RESPONDED, AS DID AMBULANCES FROM THE [REDACTED] COUNTY AMBULANCE SERVICE, AND FIRST RESPONDERS FROM THE [REDACTED] DEPARTMENT, UNDER THE COMMAND OF CHIEF [REDACTED].

WHILE WE WERE ENROUTE, WE WERE TOLD THAT IT WAS APPARENTLY A HEAD-ON COLLISION.

WHEN SHERIFF [REDACTED] AND I ARRIVED, UNDERSHERIFF [REDACTED] WAS ALREADY THERE, AS WELL AS ONE AMBULANCE UNIT AND SEVERAL FIRST RESPONDERS. NORTH OF [REDACTED] RD ON THE CURVE LEADING TO [REDACTED] TERRACE, I SAW A GREY CHEVROLET CORSICA, POINTED TO THE NORTH, AND JUST NORTH OF THE CORSICA WAS A RED CHEVROLET LUMINA, POINTED TO THE SOUTH. THE FRONT ENDS OF BOTH CARS WERE DAMAGED, WITH THE PASSENGER SIDE FRONT CORNER OF EACH VEHICLE SHOWING THE MOST DAMAGE. IN THE ROADSIDE BESIDE THE LUMINA, I SAW A WHITE FEMALE, LATER IDENTIFIED AS [REDACTED] SITTING UP, SURROUNDED BY FIRST RESPONDERS WHO WERE SUPPORTING HER NECK. BESIDE HER, I SAW UNDERSHERIFF [REDACTED] AND EMTS STRAPPING A SMALL BOY, LATER IDENTIFIED AS [REDACTED] AGE 5, TO A SPINE BOARD, AND CARRIED THE SPINE BOARD TO THE FIRST AMBULANCE, WHICH TRANSPORTED HIM IMMEDIATELY TO THE EMERGENCY ROOM AT [REDACTED] IN [REDACTED]. JUST BEFORE MY ARRIVAL, I HEARD UNDERSHERIFF [REDACTED] NOTIFY THE SECOND AMBULANCE CREW THAT A THIRD VICTIM, LATER IDENTIFIED AS [REDACTED] WAS SEATED IN HIS CAR, WITH A CUT ON HER LOWER LIP, AND COMPLAINING OF PAIN IN HER ARM. THE [REDACTED] AMBULANCE UNIT ARRIVED, AND TRANSPORTED [REDACTED] AND [REDACTED] TO [REDACTED].

AFTER THE INJURED WERE TRANSPORTED FROM THE SCENE, SHERIFF [REDACTED] UNDERSHERIFF [REDACTED], AND I BEGAN TO DIAGRAM THE ACCIDENT SCENE, WHILE DEPUTY [REDACTED] OBTAINED VEHICLE INFORMATION. AFTER THE DIAGRAM INFORMATION WAS TAKEN, BOTH VEHICLES WERE TOWED FROM THE SCENE BY [REDACTED] WRECKER SERVICE OF [REDACTED].

WHEN WE LEFT THE SCENE, UNDERSHERIFF [REDACTED] AND I WENT TO [REDACTED] HOSPITAL. UNDERSHERIFF [REDACTED] ASKED THE DISPATCHER TO SEND DEPUTY [REDACTED] TO MEET US AT THE EMERGENCY ROOM. WHEN WE ARRIVED, WE LEARNED THAT [REDACTED] HAD DIED.

UNDERSHERIFF [REDACTED] OBTAINED DRIVERS INFORMATION AND STATEMENTS FROM BOTH DRIVERS. DEPUTY [REDACTED] OBTAINED A BLOOD SAMPLE FROM [REDACTED], AND AT THE SAME TIME, I OBTAINED A BLOOD SAMPLE FROM [REDACTED] WHICH WAS [REDACTED] BY [REDACTED] RN. WHEN I EXPLAINED TO MS. [REDACTED] THAT WE NEEDED TO HAVE A SAMPLE OF HER BLOOD FOR TESTING, SHE ASKED ME IF SINUS MEDICATION WOULD SHOW UP IN THE TEST. MS. [REDACTED] TOLD ME THAT AT ABOUT 1330 HRS. THAT AFTERNOON, SHE TOOK A DOSE OF SINE-AWAY BRAND SINUS MEDICATION, CONSISTING OF TWO 30 MG TABLETS OF PSEUDOEPHIDRINE. I SEALED MS. [REDACTED] BLOOD SAMPLE, AND TRANSFERRED IT TO DEPUTY [REDACTED] WHO WAS TO TRANSPORT BOTH SAMPLES TO THE [REDACTED] BUREAU OF INVESTIGATION LABORATORY IN [REDACTED] FOR TESTING.

NOTHING FURTHER TO REPORT AT THIS TIME.

[REDACTED]

CASE NUMBER: [REDACTED]

PAGE 3 of 3

VICTIM: [REDACTED]

DATE OF ACCIDENT: [REDACTED] 7/96

On [REDACTED] 7/96 [REDACTED] was dispatched to the intersection of [REDACTED] Road and [REDACTED] Terrace in reference to a serious traffic accident. The accident was investigated by myself, with the [REDACTED] and [REDACTED] and [REDACTED] and [REDACTED]

From the investigation D1 was southbound on [REDACTED] Terrace in V1 just getting into the curve to go east on [REDACTED] Road. D2 was westbound on [REDACTED] Road in V2 and in the process of following the curve in the road to go north on [REDACTED] Terrace.

V1 was near the center of the roadway as V1 rounded the curve. V2 appeared to have been close to the right side of the roadway as V2 rounded the curve. When the drivers saw each other, both attempted to take evasive action by steering to the left. The vehicles hit nearly head on with the primary point of impact on the right front areas of both vehicles.

D1 had applied the brakes on V1 prior to impact leaving 13 feet, two inches of skid on the gravel roadway prior to impact. There were no other marks that were identifiable at the scene.

[REDACTED]

[REDACTED]



**ACCIDENT COLLISION MEASUREMENT TABLE**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## ACCIDENT COLLISION MEASUREMENT TABLE

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

Primary Sampling Unit Number / 0

Case Number—Stratum 96 / 8

### ACCIDENT COLLISION DIAGRAM

Document the physical plant.

- all road/roadway delineation (e.g., curbs/edge lines, line markings, median markings, pavement markings, parked vehicles, poles, signs, etc.)
- all traffic controls (e.g., signs/signals, etc.)
- north arrow placed on diagram
- roadway surface type and condition of applicable roadways
- grade measurements for all applicable roadways and at location of rollover initiation
- roadway curvature (include measurement of precrash superelevation for each vehicle if applicable)

Document vehicle dynamics including:

- reference point and reference line relative to physical features present at the scene
- scaled documentation of all accident induced physical evidence
- scaled documentation of all roadside objects contacted
- scaled representations of the vehicle(s) at pre-impact, impact, and final rest based upon either:
  - a) physical evidence, or
  - b) reconstructed accident dynamics

## CRASH DATA

	VEH. #1	VEH. #2	VEH. #3
Heading Angle	<u>155</u>	<u>323</u>	
Surface Type	<u>GRAVEL</u>		
Surface Condition	<u>DRY</u>	<u>DRY</u>	
Coefficient of Friction			
Grade (v/h) Measurement (between impact and final rest)	<u>.4%</u>	<u>.4%</u>	
Grade (v/h) Measurement (at location of rollover initiation)			
Grade (v/h) Measurement (at pre-crash location)	<u>2%</u>	<u>.7%</u>	

**Reference Point:**

**Reference line:**

\* All MEASUREMENTS obtained from Police DIAGRAM

[illegible]

[illegible]



**NASS CDS ACCIDENT FORM**



## ACCIDENT FORM

1. Primary Sampling Unit Number

10

2. Case Number - Stratum

9618

### IDENTIFICATION

3. Number of General Vehicle  
Forms Submitted

02

4. Date of Accident  
(Month, Day, Year)

9 6

5. Time of Accident

1650

Code reported military time of accident.

NOTE: Midnight = 2400  
Unknown = 9999

### SPECIAL STUDIES - INDICATORS

Check (✓) each special study (SS15-SS18 below) that has been completed; code 1 for the checked special studies and 0 for the special studies not checked.

6.      SS15 Administrative Use

0

7.      SS16 Pedestrian Crash Data Study  
(Data for this special study available  
in a separate file.)

0

8.      SS17 Impact Fires

0

9.      SS18 Unsafe Driver Actions

0

10.      SS19 Run Off Road

0

### NUMBER OF EVENTS

11. Number of Recorded Events  
in This Accident

01

Code the number of events which occurred  
in this accident.

### ACCIDENT EVENTS

For each event that occurred in the accident, code the lowest numbered vehicle in the left columns and the other involved vehicle or object in the right columns.

Accident Event Sequence Number	Vehicle Number	Class Of Vehicle	General Area of Damage	Vehicle Number or Object Contacted	Class Of Vehicle	General Area of Damage
12. <u>0 1</u>	13. <u>01</u>	14. <u>03</u>	15. <u>F</u>	16. <u>02</u>	17. <u>02</u>	18. <u>F</u>
19. <u>0 2</u>	20. <u>    </u>	21. <u>    </u>	22. <u>    </u>	23. <u>    </u>	24. <u>    </u>	25. <u>    </u>
26. <u>0 3</u>	27. <u>    </u>	28. <u>    </u>	29. <u>    </u>	30. <u>    </u>	31. <u>    </u>	32. <u>    </u>
33. <u>0 4</u>	34. <u>    </u>	35. <u>    </u>	36. <u>    </u>	37. <u>    </u>	38. <u>    </u>	39. <u>    </u>
40. <u>0 5</u>	41. <u>    </u>	42. <u>    </u>	43. <u>    </u>	44. <u>    </u>	45. <u>    </u>	46. <u>    </u>

IF GREATER THAN FIVE EVENTS, CONTINUE CODING ON THE ACCIDENT EVENT SUPPLEMENT

## CODES FOR CLASS OF VEHICLE

- CV: 107.5  $\Rightarrow$  273.1
- VZ: 103.4  $\Rightarrow$  262.6
- |   |  |
|---|--|
| (00) Not a motor vehicle                                | (31) Large pickup truck ( $\leq$ 4,536 kgs GVWR)           |
| (01) Subcompact/mini (wheelbase $<$ 254 cm)             | (38) Other pickup truck ( $\leq$ 4,536 kgs GVWR)           |
| (02) Compact (wheelbase $\geq$ 254 but $<$ 265 cm)      | (39) Unknown pickup truck type ( $\leq$ 4,536 kgs GVWR)    |
| (03) Intermediate (wheelbase $\geq$ 265 but $<$ 278 cm) | (45) Other light truck ( $\leq$ 4,536 kgs GVWR)            |
| (04) Full size (wheelbase $\geq$ 278 but $<$ 291 cm)    | (48) Unknown light truck type ( $\leq$ 4,536 kgs GVWR)     |
| (05) Largest (wheelbase $\geq$ 291 cm)                  | (49) Unknown light vehicle type                            |
| (09) Unknown passenger car size                         | (50) School bus (excludes van based) ( $>$ 4,536 kgs GVWR) |
| (14) Compact utility vehicle                            | (58) Other bus ( $>$ 4,536 kgs GVWR)                       |
| (15) Large utility vehicle ( $\leq$ 4,536 kgs GVWR)     | (59) Unknown bus type                                      |
| (16) Utility station wagon ( $\leq$ 4,536 kgs GVWR)     | (60) Truck ( $>$ 4,536 kgs GVWR)                           |
| (19) Unknown utility type                               | (67) Tractor without trailer                               |
| (20) Minivan ( $\leq$ 4,536 kgs GVWR)                   | (68) Tractor-trailer(s)                                    |
| (21) Large van ( $\leq$ 4,536 kgs GVWR)                 | (78) Unknown medium/heavy truck type                       |
| (24) Van Based school bus ( $\leq$ 4,536 kgs GVWR)      | (79) Unknown light/medium/heavy truck type                 |
| (28) Other van type ( $\leq$ 4,536 kgs GVWR)            | (80) Motored cycle   |
| (29) Unknown van type ( $\leq$ 4,536 kgs GVWR)          | (90) Other vehicle   |
| (30) Compact pickup truck ( $\leq$ 4,536 kgs GVWR)      | (99) Unknown   |

## CODES FOR GENERAL AREA OF DAMAGE (GAD)

- |                |                         |                |                   |
|----------------|-------------------------|----------------|-------------------|
| CDS APPLICABLE | (O) Not a motor vehicle | (R) Right side | (T) Top           |
| AND OTHER      | (N) Noncollision        | (L) Left side  | (U) Undercarriage |
| VEHICLES       | (F) Front               | (B) Back       | (9) Unknown       |

- |            |                         |                                     |                         |
|------------|-------------------------|-------------------------------------|-------------------------|
| TDC        | (O) Not a motor vehicle | (L) Left side                       | (C) Rear of cab         |
| APPLICABLE | (N) Noncollision        | (B) Back of unit with cargo area    | (V) Front of cargo area |
| VEHICLES   | (F) Front               | (rear of trailer or straight truck) | (T) Top                 |
|            | (R) Right side          | (D) Back (rear of tractor)          | (U) Undercarriage       |
|            |                         |                                     | (9) Unknown             |

## CODES FOR VEHICLE NUMBER OR OBJECT CONTACTED

## (01-30) — Vehicle Number

## Noncollision

- (31) Overturn — rollover (excludes end-over-end)  
 (32) Rollover — end-over-end  
 (33) Fire or explosion  
 (34) Jackknife  
 (35) Other intraunit damage (specify): \_\_\_\_\_

(36) Noncollision injury

(38) Other noncollision (specify): \_\_\_\_\_

(39) Noncollision — details unknown

## Collision With Fixed Object

- (41) Tree ( $\leq$  10 cm in diameter)  
 (42) Tree ( $>$  10 cm in diameter)  
 (43) Shrubbery or bush  
 (44) Embankment  
 (45) Breakaway pole or post (any diameter)

## Nonbreakaway Pole or Post

- (50) Pole or post ( $\leq$  10 cm in diameter)  
 (51) Pole or post ( $>$  10 cm but  $\leq$  30 cm in diameter)  
 (52) Pole or post ( $>$  30 cm in diameter)  
 (53) Pole or post (diameter unknown)

(54) Concrete traffic barrier

(55) Impact attenuator

(56) Other traffic barrier (includes guardrail)  
(specify): \_\_\_\_\_

(57) Fence

(58) Wall

(59) Building

(60) Ditch or culvert

(61) Ground

(62) Fire hydrant

(63) Curb

(64) Bridge

(68) Other fixed object (specify): \_\_\_\_\_

(69) Unknown fixed object

## Collision with Nonfixed Object

- (70) Passenger car, light truck, van, or other vehicle not in-transport  
 (71) Medium/heavy truck or bus not in-transport  
 (72) Pedestrian  
 (73) Cyclist or cycle  
 (74) Other nonmotorist or conveyance

(75) Vehicle occupant

(76) Animal

(77) Train

(78) Trailer, disconnected in transport

(79) Object fell from vehicle in-transport

(88) Other nonfixed object (specify): \_\_\_\_\_

(89) Unknown nonfixed object

(98) Other event (specify): \_\_\_\_\_

(99) Unknown event or object



**NASS CDS VEHICLE FORMS: CASE VEHICLE**



## GENERAL VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

### VEHICLE IDENTIFICATION

4. Vehicle Model Year  
Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify):

Chevrolet  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify):

LUMINA  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

7. Body Type

Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

2G1WL52M351  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17  
Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nines

9. Vehicle Special Use (This Trip)

- (0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify):  
(9) Unknown

### OFFICIAL RECORDS

10. Police Reported Vehicle Disposition  
(0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

11. Police Reported Travel Speed  
Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown

20 mph X 1.6093 = 32 kmph

12. Speed Limit

(000) No statutory limit  
Code posted or statutory speed limit in kmph  
(999) Unknown

55 mph X 1.6093 = 88.51 kmph

13. Police Reported Alcohol Presence For Driver

- (0) No alcohol present  
(1) Yes alcohol present  
(7) Not reported  
(8) No driver present  
(9) Unknown

14. Alcohol Test Result For Driver  
Code actual value (decimal implied  
before first digit—0.xx)

- (95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source:

15. Police Reported Other Drug Presence For Driver

- (0) No other drug(s) present  
(1) Yes other drug(s) present  
(7) Not reported  
(8) No driver present  
(9) Unknown

16. Other Drug Specimen Test Result For Driver

- (0) No specimen test given  
(1) Drug(s) not found in specimen  
(2) Drug(s) found in specimen, (specify):  
(3) Specimen test given, results unknown or not  
obtained  
(8) No driver present  
(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories

Code actual 5-digit zip code  
(99998) No driver present  
(99999) Unknown

18. Driver's Race/Ethnic Origin

- (1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(7) Other (specify):

- (8) No driver present  
(9) Unknown

## CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

*Automobiles*

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

*Automobile Derivatives*

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

*Utility Vehicles ( $\leq 4,536$  kgs GVWR)*

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

*Van Based Light Trucks ( $\leq 4,536$  kgs GVWR)*

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,536$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,536$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,536$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,536$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

*Light Conventional Trucks (Pickup style cab,  $\leq 4,536$  kgs GVWR)*

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

*Other Light Trucks ( $\leq 4,536$  kgs GVWR)*

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

*Buses (Excludes Van Based)*

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

*Medium/Heavy Trucks ( $> 4,536$  kgs GVWR)*

- (60) Step van ( $> 4,536$  kgs GVWR)
- (61) Single unit straight truck ( $4,536$  kgs  $<$  GVWR  $\leq 8,845$  kgs)
- (62) Single unit straight truck ( $8,845$  kgs  $<$  GVWR  $\leq 11,793$  kgs)
- (63) Single unit straight truck ( $> 11,793$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

*Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)*

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

*Other Vehicles*

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type



**PRECRASH ENVIRONMENTAL DATA**

19. Relation To Interchange Or Junction 2  
 (0) Non-interchange area and non-junction  
 (1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related  
 (3) Driveway, alley access related  
 (4) Other junction (specify) \_\_\_\_\_

(5) Unknown type of junction \_\_\_\_\_

(9) Unknown

20. Trafficway Flow 0  
 (0) Not physically divided (two way traffic)  
 (1) Divided trafficway-median strip without positive barrier  
 (2) Divided trafficway-median strip with positive barrier  
 (3) One way traffic  
 (9) Unknown

21. Number Of Travel Lanes 2  
 (1) One  
 (2) Two  
 (3) Three  
 (4) Four  
 (5) Five  
 (6) Six  
 (7) Seven or more  
 (9) Unknown

22. Roadway Alignment 3  
 (1) Straight  
 (2) Curve right  
 (3) Curve left  
 (9) Unknown

23. Roadway Profile 4  
 (1) Level  
 (2) Uphill grade (> 2%)  
 (3) Hill crest  
 (4) Downhill grade (> 2%)  
 (5) Sag  
 (9) Unknown

24. Roadway Surface Type 4  
 (1) Concrete  
 (2) Bituminous (asphalt)  
 (3) Brick or block  
 (4) Slag, gravel, or stone  
 (5) Dirt  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

25. Roadway Surface Condition 1

- (1) Dry  
 (2) Wet  
 (3) Snow or slush  
 (4) Ice  
 (5) Sand, dirt, or oil  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

26. Light Conditions 1

- (1) Daylight  
 (2) Dark  
 (3) Dark, but lighted  
 (4) Dawn  
 (5) Dusk  
 (9) Unknown

27. Atmospheric Conditions 0

- (0) No adverse atmospheric-related driving conditions  
 (1) Rain  
 (2) Sleet/hail  
 (3) Snow  
 (4) Fog  
 (5) Rain and fog  
 (6) Sleet and fog  
 (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_  
 (9) Unknown

28. Traffic Control Device 6

- (0) No traffic control(s)  
 (1) Traffic control signal (not RR crossing)

*Regulatory*

- (2) Stop sign  
 (3) Yield sign  
 (4) School zone sign  
 (5) Other regulatory sign (specify): \_\_\_\_\_

- (6) Warning sign (not RR crossing) CURVE  
 (7) Unknown sign  
 (8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_

(9) Unknown

29. Traffic Control Device Functioning 2

- (0) No traffic control device  
 (1) Traffic control device not functioning (specify): \_\_\_\_\_  
 (2) Traffic control device functioning properly  
 (9) Unknown

**PRECRASH DRIVER RELATED DATA**

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 01
- (00) No driver present
  - (01) Attentive or not distracted
  - (02) Looked but did not see
  - *Distractions*
  - (03) By other occupant(s), (specify): \_\_\_\_\_
  - (04) By moving object in vehicle (specify): \_\_\_\_\_
  - (05) While talking or listening to cellular phone (specify location and type of phone): \_\_\_\_\_
  - (06) While dialing cellular phone (specify location and type of phone): \_\_\_\_\_
  - (07) While adjusting climate controls
  - (08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_
  - (09) While using other device/controls integral to vehicle (specify): \_\_\_\_\_
  - (10) While using or reaching for device/object brought into vehicle (specify): \_\_\_\_\_
  - (11) Sleepy or fell asleep
  - (12) Distracted by outside person, object, or event (specify): \_\_\_\_\_
  - (13) Eating or drinking
  - (14) Smoking related
  - (97) Distracted/inattentive, details unknown
  - (98) Other, distraction (specify): \_\_\_\_\_
  - (99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 14
- (00) No driver present
  - (01) Going straight
  - (02) Decelerating in traffic lane
  - (03) Accelerating in traffic lane
  - (04) Starting in traffic lane
  - (05) Stopped in traffic lane
  - (06) Passing or overtaking another vehicle
  - (07) Disabled or parked in travel lane
  - (08) Leaving a parking position
  - (09) Entering a parking position
  - (10) Turning right
  - (11) Turning left
  - (12) Making a U-turn
  - (13) Backing up (other than for parking position)
  - (14) Negotiating a curve
  - (15) Changing lanes
  - (16) Merging
  - (17) Successful avoidance maneuver to a previous critical event
  - (97) Other (specify): \_\_\_\_\_
  - (99) Unknown

32. Critical Precrash Event 10
- THIS VEHICLE LOSS OF CONTROL DUE TO:**
- (01) Blow out or flat tire
  - (02) Stalled engine
  - (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
  - (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
  - (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
  - (06) Traveling too fast for conditions
  - (08) Other cause of control loss (specify): \_\_\_\_\_
  - (09) Unknown cause of control loss

**THIS VEHICLE TRAVELLING**

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (18) This vehicle decelerating
- (19) Unknown travel direction

**OTHER MOTOR VEHICLE IN LANE**

- (50) Other vehicle stopped
- (51) Traveling in same direction with lower steady speed
- (52) Traveling in same direction while decelerating
- (53) Traveling in same direction with higher speed
- (54) Traveling in opposite direction
- (55) In crossover
- (56) Backing
- (59) Unknown travel direction of other motor vehicle in lane

**OTHER MOTOR VEHICLE ENCROACHING INTO LANE**

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

**PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST**

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

**OBJECT OR ANIMAL**

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): \_\_\_\_\_
- (99) Unknown

33. Attempted Avoidance Maneuver 08

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 2

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Precrash stability unknown

35. Pre-Impact Location 1

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 52

(Note: Applicable codes on back of this page)

(00) No impact

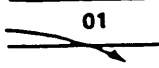
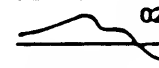
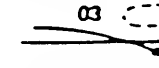
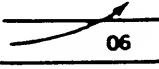
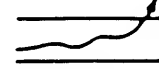
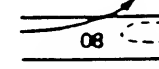
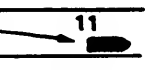

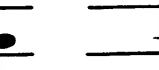
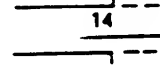
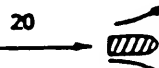
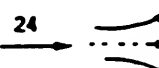
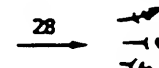
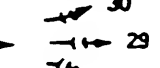

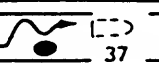
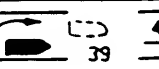
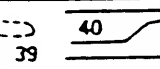
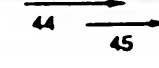

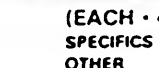
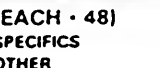

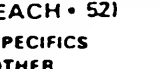

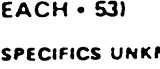
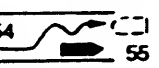
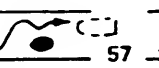
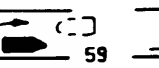
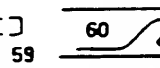
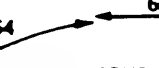
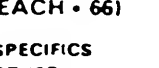
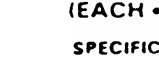
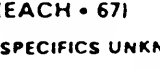
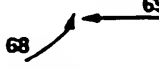

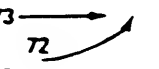

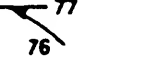

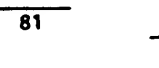
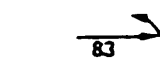

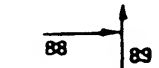
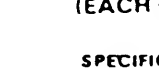

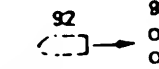

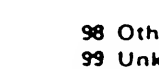


Code the number of the diagram that best describes the accident circumstance

(98) Other accident type (specify):

(99) Unknown

**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**



Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER 16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 24 SLOWER 25, 26, 27	 28 DECEL. 29, 30, 31	 30 SPECIFICS OTHER	(EACH • 32) (EACH • 33) SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	(EACH • 42) (EACH • 43) SPECIFICS OTHER SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 SPECIFICS OTHER	 46 SPECIFICS OTHER	 48 SPECIFICS OTHER	 49 SPECIFICS UNKNOWN	(EACH • 48) (EACH • 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G Head-On	 50 LATERAL MOVE	 51 SPECIFICS OTHER	 52 SPECIFICS UNKNOWN	 53 SPECIFICS UNKNOWN	(EACH • 52) (EACH • 53) SPECIFICS UNKNOWN
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	(EACH • 62) (EACH • 63) SPECIFICS OTHER SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 LATERAL MOVE	 65 SPECIFICS OTHER	 66 SPECIFICS UNKNOWN	 67 SPECIFICS UNKNOWN	(EACH • 66) (EACH • 67) SPECIFICS UNKNOWN
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 71 INITIAL SAME DIRECTIONS	 73 SPECIFICS OTHER	 74 SPECIFICS UNKNOWN	(EACH • 74) (EACH • 75) SPECIFICS UNKNOWN
	K Turn Into Path	 77 TURN INTO SAME DIRECTION	 79 TURN INTO OPPOSITE DIRECTIONS	 81 SPECIFICS OTHER	 83 SPECIFICS UNKNOWN	(EACH • 84) (EACH • 85) SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 86 SPECIFICS OTHER	 88 SPECIFICS UNKNOWN	 89 SPECIFICS UNKNOWN	 90 SPECIFICS UNKNOWN	(EACH • 90) (EACH • 91) SPECIFICS UNKNOWN
VI Miscellaneous	M Backing Etc	 92 BACKING VEH	 93 OTHER VEH OR OBJECT	 98 Other Accident Type	 99 Unknown Accident Type	 00 No Impact

**OCCUPANT RELATED**

37. Driver Presence in Vehicle 1  
 (0) Driver not present  
 (1) Driver present  
 (9) Unknown
38. Number of Occupants This Vehicle 03  
 (00-96) Code actual number of occupants for this vehicle  
 (97) 97 or more  
 (99) Unknown
39. Number of Occupant Forms Submitted 03

**AIR BAG RELATED**

40. Is this an AOPS Vehicle? 1  
 (0) No (includes unknown)  
 (1) Yes - researcher determined  
 (2) VIN determined air bag system  
 (3) VIN determined automatic (passive) belts  
 (4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 6  
 (0) Not equipped or not available  
 (1) No air bags deployed  
*Single Air Bag Vehicle*  
 (2) Driver air bag deployed  
 (3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
 (4) Driver side only deployed  
 (5) Passenger side only deployed  
 (6) Driver and passenger side deployed  
 (7) Driver and passenger side unknown if deployed  
 (8) Air bag(s) deployed, details unknown  
 (9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
 (0) Not equipped with an "other" air bag  
 (1) Deployed during accident (as a result of impact)  
 (2) Deployed inadvertently just prior to accident  
 (3) Deployed, details unknown  
 (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
 (5) Unknown if deployed  
 (7) Nondeployed  
 (9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

**VEHICLE WEIGHT ITEMS**

43. Vehicle Curb Weight 1.510  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (045) Less than 454 kilograms  
 (612) 6,124 kilograms or more  
 (999) Unknown  
3330 lbs X .4536 = 1.510 kgs

Source: \_\_\_\_\_

44. Vehicle Cargo Weight 0.000  
 \_\_\_\_\_ Code weight to nearest 10 kilograms.  
 (000) Less than 5 kilograms  
 (454) 4,536 kilograms or more  
 (999) Unknown  
 \_\_\_\_\_ lbs X .4536 = 2.3 kgs

Source: DRIVER interview**ROLLOVER DATA**

45. Rollover 00  
 (00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
 (01-16) Code the number of quarter turns  
 (17) Rollover, 17 or more quarter turns (specify): \_\_\_\_\_  
 (98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
 (99) Rollover (overturn), details unknown
46. Rollover Initiation Type 00  
 (00) No rollover  
 (01) Trip-over  
 (02) Flip-over  
 (03) Turn-over  
 (04) Climb-over  
 (05) Fall-over  
 (06) Bounce-over  
 (07) Collision with another vehicle  
 (08) Other rollover initiation type specify): \_\_\_\_\_  
 (98) Rollover--end-over-end  
 (99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
 (0) No rollover  
 (1) On roadway  
 (2) On shoulder--paved  
 (3) On shoulder--unpaved  
 (4) On roadside or divided trafficway median  
 (8) Rollover--end-over-end  
 (9) Unknown
48. Rollover Initiation Object Contacted 00  
 (Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
 (0) No rollover  
 (1) Wheels/tires  
 (2) Side plane  
 (3) End plane  
 (4) Undercarriage  
 (5) Other location on vehicle (specify): \_\_\_\_\_  
 (6) Non-contact rollover forces (specify): \_\_\_\_\_  
 (8) Rollover--end-over-end  
 (9) Unknown
50. Direction of Initial Roll 0  
 (0) No rollover  
 (1) Roll right - primarily about the longitudinal axis  
 (2) Roll left - primarily about the longitudinal axis  
 (8) Rollover--end-over-end  
 (9) Unknown roll direction

**OVERRIDE/UNDERRIDE (THIS VEHICLE)**

51. Front Override/Underride (this Vehicle) 0
52. Rear Override/Underride (this Vehicle) 0
- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

*Override (see specific CDC)**(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))*

- (1) 1st CDC
- (2) 2nd CDC
- (3) Other not automated CDC (specify): \_\_\_\_\_

*Underride (see specific CDC)**(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))*

- (4) 1st CDC
- (5) 2nd CDC
- (6) Other not automated CDC (specify): \_\_\_\_\_

- (7) Medium/heavy truck or bus override (of any configuration)
- (9) Unknown

**HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V**

Values: (000)-(359) Code actual value

- (996) Non-horizontal impact
- (997) Noncollision
- (998) Impact with object
- (999) Unknown

53. Heading Angle For This Vehicle 155
54. Heading Angle For Other Vehicle 320

**RECONSTRUCTION DATA**

55. Towed Trailing Unit 0
- (0) No towed unit
- (1) Yes—towed trailing unit
- (9) Unknown
56. Documentation of Trajectory Data for This Vehicle 0
- (0) No
- (1) Yes
57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0
- (0) Not collision (for highest delta V) with tree or pole
- (1) Not damaged
- (2) Cracked/sheared
- (3) Tilted <45 degrees
- (4) Tilted ≥45 degrees
- (5) Uprooted tree
- (6) Separated pole from base
- (7) Pole replaced
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V**

58. Basis for Total (Resultant) Delta V (highest) 01

(00) No vehicle inspection

*Delta V Calculated*

- (01) Reconstruction program-damage only routine
- (02) Reconstruction program-damage and trajectory routine
- (03) Missing vehicle algorithm

*Delta V Not Calculated*

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

- (05) Rollover
- (06) Other non-horizontal forces
- (07) Sideswipe type damage
- (08) Severe override
- (09) Yielding object
- (10) Overlapping damage
- (11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify): \_\_\_\_\_

- (98) Other, (specify): \_\_\_\_\_



## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

Highest

1919 Nearest kmph (highest)       Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

60. Longitudinal Component of Delta V

Highest

+ 018-18 Nearest kmph (highest)       Nearest kmph (secondary)

(NOTE: 000 means greater than  
 -0.5 kmph and less than +0.5 kmph)  
 (±160) ±159.5 kmph and above  
 (999) Unknown

61. Lateral Component of Delta V

Highest

+ 003+3 Nearest kmph (highest)       Nearest kmph (secondary)

(NOTE: 000 means greater than -0.5 kmph and  
 less than +0.5 kmph)  
 (±160) ±159.5 kmph and above  
 (999) Unknown

62. Energy Absorption

Highest

031.80031778 Nearest 100 joules (highest)       Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)  
 (9997) 999,650 joules or more  
 (9999) Unknown

63. Impact Speed

Highest

998       Nearest kmph (highest)       Nearest kmph (secondary)

(NOTE: 000 means  
 less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (998) Trajectory algorithm not run  
 (999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V)

3

- (0) No reconstruction  
 (1) Collision fits model — results appear reasonable  
 (2) Collision fits model — results appear high  
 (3) Collision fits model — results appear low  
 (4) Borderline reconstruction — results appear reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

Highest

01818.0 Nearest kmph (highest)       Nearest kmph (secondary)

(NOTE: 000 means  
 less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

## ESTIMATED DELTA V

## INSPECTION TYPE

66. Estimated Highest Delta V (Researcher Determined)

(0) Reconstruction Delta V coded

*Estimated Delta V*

- (1) Less than 10 kmph  
(2)  $\geq$  10 kmph but  $<$  25 kmph  
(3)  $\geq$  25 kmph but  $<$  40 kmph  
(4)  $\geq$  40 kmph but  $<$  55 kmph  
(5)  $\geq$  55 kmph

*Other estimates of damage severity*

- (6) Minor  
(7) Moderate  
(8) Severe  
(9) Unknown

67. Type of Vehicle Inspection

- (0) No inspection  
(1) Vehicle fully repaired-no damage evident  
(2) Partial inspection (specify):  
(3) Complete inspection

## DELTA V EVENT NUMBER

68. Delta V Event Number

- Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle  
(99) Unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

1. Primary Sampling Unit Number	<u>1</u> <u>0</u>	3. Vehicle Number	<u>0</u> <u>1</u>
2. Case Number - Stratum	<u>9</u> <u>6</u> <u>1</u> <u>8</u>		

## VEHICLE IDENTIFICATION

VIN 2G1WL52M3S1 Model Year 95  
Vehicle Make (specify): Chevrolet Vehicle Model (specify): Lumina

## LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	starts 17cm (L) of center	across front bumper	C-6

### CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.


Use as many lines/columns as necessary to describe each damage profile.

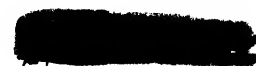
[illegible]



## ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase	<u>107.5</u>	inches	x 2.54	=	<u>273.1</u>	cm
Overall Length	<u>200.9</u>	inches	x 2.54	=	<u>510.3</u>	cm
Maximum Width	<u>72.5</u>	inches	x 2.54	=	<u>184.2</u>	cm
Curb Weight	<u>3,330</u>	pounds	x 0.4536	=	<u>1,510.5</u>	kg
Average Track	<sup>59.1?</sup> <sub>59.0</sub> } <u>59.05</u>	inches	x 2.54	=	<u>150.0</u>	cm
Front Overhang	_____	inches	x 2.54	=	_____	cm
Rear Overhang	_____	inches	x 2.54	=	_____	cm
Undeformed End Width	<u>59.</u>	inches	x 2.54	=	<u>150</u>	cm
Engine Size: cyl/displ.	_____	cc	x 0.001	=	<u>3.1</u>	L
V-6 6-passenger	<u>191</u>	CID	x 0.0164	=	<u>3.1</u>	L

 Shipping Weight 3,245  
100  
3,345

 Curb Weight 3,330

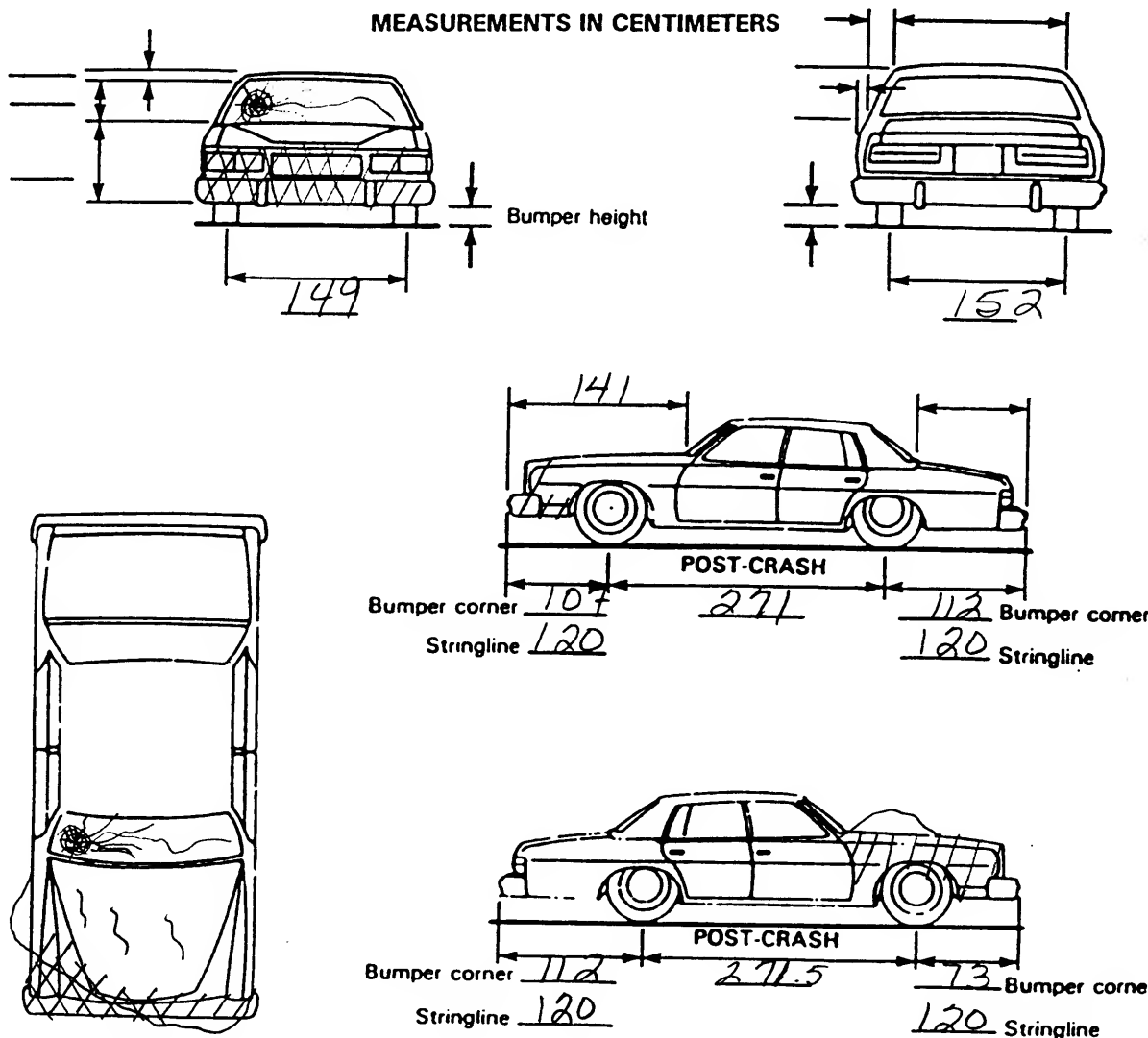
## SPECIAL CRASH INVESTIGATION ADDENDUM

Submodel Designation: {specify}	Color: {specify}	Repair Cost: \$
Transmission: {circle} <u>Automatic</u>   Manual	Speed: 3-speed   <u>4-speed</u>   5-speed   Other:	
Steering: {circle} <u>Power-assisted</u>   Manual	Type: <u>rack-and-pinion</u>   worm-and-gear   Other	
(please describe):		
Brakes: {circle} <u>Power-assisted</u>   Manual	Type: <u>4-wheel disc</u>   4-wheel drum   4-wheel hydraulic	
<u>front disc, rear drum</u>   Other:		
Observed Defects: {specify}		
Fleet Type: {circle} <u>Private vehicle</u>   Rental vehicle   Leased vehicle   Commercial vehicle   Other		
(please describe):		

## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>1</u> LF <u>2</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		b. Tire deflated RF <u>2</u> LF <u>2</u> RR <u>2</u> LR <u>1</u>		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>273</u> cm Overall Length <u>510</u> cm Maximum Width <u>184</u> cm Curb Weight <u>1510</u> kg Average Track <u>150</u> cm Front Overhang <u>118</u> cm Rear Overhang <u>121</u> cm Undeformed End Width <u>150</u> cm Engine Size: cyl./displ. <u>V-6 3.1</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF $\pm$ _____° LF $\pm$ _____° RR $\pm$ _____° LR $\pm$ _____° Within $\pm$ 5 degrees	
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic END SHIFT $\geq$ 10 CM <input type="checkbox"/> Yes <input type="checkbox"/> No				<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD Approximate Cargo Weight _____ kg			

## MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

## BRANHAM AUTOMOBILE REFERENCE BOOK-PASSENGER CAR SECTION

CHEVROLET Division, **48202**

Type of Body Pass. Cap.		Model	Wheel Base	Dimensions Inches Lt x Wt x Ht		Ship. Wt.	Tax H.P.	Factory List Price	Factory Del'd Price
Man. Trans. 5-speed(MJ1); EPA Mileage Estimate 20/28									
5-PS 4-dr NB Sedan LS		1JF69	104.1"	180.3"	67.9" x 54.8"	2846	20.97	10,660	11,145
4-PS 2-dr Convertible LS		1JF67	104.1"	180.3"	68.7" x 53.9"	2904	20.97	17,110	17595
Auto. Trans. 3-speed(MN4); EPA Mileage Estimate									
5-PS 2-dr NB Coupe Z24		1JF37	104.1"	180.3"	68.7" x 53.2"	2788	20.97	13,810	14,295
5-PS 4-dr NB Sedan LS		1JF69	104.1"	180.3"	67.9" x 54.8"	2846	20.97	12,860	13,345
4-PS 2-dr Convertible LS		1JF67	104.1"	180.3"	68.7" x 53.9"	2948	20.97	17,605	18,090
Options Cavalier Series: Destination Charges-\$485; 4 cyl 2.3 liter PFI OHV Gas Engine(LD2)-\$395 Z24-std; Auto. Trans. 3-speed-\$495 Z24-std; Preferred Equip. Groups Base(1) Sedan-\$193 Coupe-\$290 (2) Sedan-\$563 Coupe-\$851 LS(1)-\$435 (2)-\$1101 Convertible-\$9965; Air Conditioning(VL Only)-\$785; Appearance Pkg(W27)-\$200; Electric Rear Window Defogger(C49)-\$170; Door Locks Power(AU3) Sedan-\$250 Coupe-\$210; Emissions (Calif & Mass)-\$100; Bucket Vinyl Seats (Convertible)-\$50; Rear Split Folding Seat-\$180; Sun Roof-\$595									
1995 Corsica Series FWD L4 cyl 2.2 liter MPFI OHV Gas Engine(LN2)(8 valve)									
Bore & Stroke 3.5"x3.46"; Tax H.P. 19.6; SAE H.P. 120@5200; Torque 130@4000; 133 cu.in., 2.2 liter									
Auto. Trans. 3-speed(MX1); EPA Mileage Estimate 25/31									
5-PS 4-dr NB Sedan		1LD69	103.4"	183.5"	68.5" x 54.2"	2659	19.6	13,890	14,385
1995 Corsica Series FWD V6 cyl 3.1 liter SPFI OHV Gas Engine(L82)(12 valve)									
Bore & Stroke 3.504"x3.307"; Tax H.P. 29.47; SAE H.P. 155@5200; Torque 185@4000; 191 cu.in., 3.1 liter									
Auto. Trans. 4-speed(M13); EPA Mileage Estimate 21/29									
5-PS 4-dr NB Sedan		1LD69	103.4"	183.5"	68.5" x 54.2"	2799	29.47	14,610	15,105
Options Corsica Series: Destination Charges-\$495; V6 3.1 liter SFI Gas Engine(L82)-\$720; Preferred Equip. Group (1)-\$165 (2)-\$745; Electric Rear Window Defogger(C49)-\$170; Emission (Calif & Mass)-\$100; Wheel (14" Styled Steel)-\$56; Power Windows(A31)-\$340									
1995 Corvette Series RWD V8 cyl 5.7 liter SFI Gas Engine(LT1)(16 valve)									
Bore & Stroke 4.0x3.48; Tax H.P. 51.2; SAE H.P. 300@5000; Torque 340@3600; 350 cu.in., 5.7 liter									
Man. Trans. 6-speed(ML9); EPA Mileage Estimate 17/27									
2-PS 2-dr Coupe		1YY07	96.2"	178.5"	70.7" x 46.3"	3160	51.2	36,785	37,345
2-PS 2-dr Convertible		1YY67	96.2"	178.5"	70.7" x 47.3"	3211	51.2	43,665	44,225
Auto. Trans. 4-speed(M30); EPA Mileage Estimate 17/24									
2-PS 2-dr Coupe		1YY07	96.2"	178.5"	70.7" x 46.3"	3203	51.2	36,785	37,345
2-PS 2-dr Convertible		1YY67	96.2"	178.5"	70.7" x 47.3"	3254	51.2	43,665	44,225
1995 Corvette RWD V8 cyl 5.7 liter SFI Gas Engine(LT5)(32 valve)									
Bore & Stroke 3.9x3.66; Tax H.P. 48.67; SAE H.P. 405@5800; Torque 385@5200; 350 cu.in., 5.7 liter									
Man. Trans. 6-speed(ML9); EPA Mileage Estimate 17/25									
2-PS 2-dr Coupe ZR-1		1YZ07	96.2"	178.5"	73.1" x 47.3"	3406	48.67	68,043	68,603
2-PS 2-dr Convertible ZR-1		1YY67	96.2"	178.5"	70.7" x 47.3"	3457	48.67	74,923	75,483
Options Corvette Series: Destination Charges-\$560; Preferred Equip. Pkg (1)-\$1333 w/AMFM Stereo(U1F)-\$1729; Emissions (Calif & Mass)-\$100; Hard Tops (Convertible)-\$1995; Low Tire Pressure Warning Indicator-\$325; Performance Handling Pkg(Z07)-\$2045; Roof Pkg(C2L)-\$950; Roof Panel (Removable Blue or Bronze Tint)-\$650; 6 way Power Seats (Driver)(AC3)-\$305 (Passenger)(AC1)-\$305; Leather Adjustable Bucket Seats(AQ9)-\$625; Selective Ride & Handling(FX3)-\$1695; Special Performance Pkg(ZR1)-\$31,258									
1995 Impala SS RWD V8 cyl 5.7 liter SFI Gas Engine(LT1)(16 Valve)									
Bore & Stroke 4.0"x3.48"; Tax H.P. 51.2; SAE H.P. 260@4800; Torque 330@3200; 350 cu.in., 5.7 liter									
Auto. Trans. 4-speed(MX0); EPA Mileage Estimate 17/26									
5-PS 4-dr NB Sedan		1BL19	115.9"	214.1"	77.5" x 54.7"	3912	51.2	22,910	23,495
Options Impala SS: Destination Charges-\$585; Preferred Equip. Group (1)-\$890; AMFM Stereo w/cassette-\$55 w/CD-\$155; Defogger (Rear Window)(C49)-\$205; Emissions (Calif & Mass)-\$100									
1995 Lumina Series FWD V6 cyl 3.1 liter MPFI OHV Gas Engine(L82)(12 valve)									
Bore & Stroke 3.503"x3.307"; Tax H.P. 29.45; SAE H.P. 160@5200; Torque 185@4000; 191 cu.in., 3.1 liter									
Auto. Trans. 4-speed(M13); EPA Mileage Estimate 19/29									
6-PS 4-dr NB Sedan		1VL69	107.5"	200.9"	72.5" x 55.2"	3245	29.45	15,460	15,995
6-PS 4-dr NB Sedan LS		1WN69	107.5"	200.9"	72.5" x 55.2"	3287	29.45	16,960	17,495
1995 Lumina Z34 Series FWD V6 cyl 3.4 liter SFI DOHC Gas Engine(LQ1)(24 valve)									
Bore & Stroke 3.623x3.307; Tax H.P. 31.5; SAE H.P. 210@5200; Torque 215@4000; 207 cu.in., 3.4 liter									
Auto. Trans. 4-speed(M13); EPA Mileage Estimate 17/26 (Includes Preferred Equip. Group (1) & P225/60R-16 Tires)									
5-PS 2-dr NB Sedan LS		1VL69	107.5"	200.9"	72.5" x 55.2"	3405	31.5	18,570	19,105
Options Lumina Series: Destination Charges-\$535; V6 cyl 3.4 liter SFI DOHC Gas Engine(LQ1)-\$960; Preferred Equip. Groups (1)-\$707 LS-\$500; 4-wheel Anti-Lock Brakes-\$386; Electric Rear Windows Defogger(C49)-\$164; Emissions (Calif & Mass)-\$100; Keyless Entry(AU0)-\$130; 6-way Power Seat(WG1)-\$260; Electronic Speed Control-\$217; Wheels (16" AL)-\$251									

1995 Lumina MiniVan Passenger &amp; Cargo FWD (See Truck Section: Chevrolet)

1995 Monte Carlo FWD V6 cyl 3.1 liter SFI OHV Gas Engine(L82)(12 valve)



CODES FOR OBJECT CONTACTED

(99) Unknown event or object

[illegible]

**COLLISION DEFORMATION CLASSIFICATION****HIGHEST DELTA "V"**

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>02</u>	6. <u>12</u>	7. <u>F</u>	8. <u>Z</u>	9. <u>E</u>	10. <u>W</u>	11. <u>02</u>

**Second Highest Delta "V"**

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
-----------	-----------	-----------	-----------	-----------	-----------	-----------	-----------

**CRUSH PROFILE IN CENTIMETERS**

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

**HIGHEST DELTA "V"**

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>± D</u>
<u>150</u>	<u>000</u>	<u>001</u>	<u>011</u>	<u>020</u>	<u>027</u>	<u>029</u>	<u>+ 046</u>

**Second Highest Delta "V"**

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>± D</u>
_____	_____	_____	_____	_____	_____	_____	_____

**26. Undeformed End Width**

(Coded when highest severity impact is an end plane impact.)

Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

150

**27. Direct Damage Width**

(For highest severity impact)

Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

088

**28. Original Wheelbase**

Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

273

**29. Original Average Track Width**

Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

150

**FUEL SYSTEM**

30. Are CDCs Documented but Not Coded on The Automated File? 0  
 (0) No  
 (1) Yes
31. Researcher's Assessment of Vehicle Disposition 1  
 (0) Not towed due to vehicle damage  
 (1) Towed due to vehicle damage  
 (9) Unknown
32. Is This A Multi-Stage Manufactured Vehicle And/Or A Certified Altered Vehicle? 0  
 (0) No post manufacturer modifications  
 (1) Yes - post manufacturer modifications (specify): \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 (Include photograph of CERTIFICATION PLACARD in case report)  
 (9) Unknown if vehicle is modified

35. Location of Fuel Tank-1 Filler Cap 2
36. Location of Fuel Tank-2 Filler Cap 0  
 (0) No fuel tank  
 (1) On back plane  
 (2) Aft of center of the rear wheels (rear axle) on left side plane  
 (3) Aft of center of the rear wheels (rear axle) on right side plane  
 (4) Forward of center of the rear wheels (rear axle) on left side plane  
 (5) Forward of center of the rear wheels (rear axle) on right side plane  
 (6) Over the center of the rear wheels (rear axle) on left side plane  
 (7) Over the center of the rear wheels (rear axle) on right side plane  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

37. Type of Fuel Tank-1 2
38. Type of Fuel Tank-2 0  
 (0) No fuel tank (electrical vehicle)  
 (1) Metallic  
 (2) Non-metallic  
 (9) Unknown

**FIRE OCCURRENCE**

33. Fire Occurrence 0  
 (0) No fire  
 Yes, fire occurred  
 (1) Minor  
 (2) Major  
 (9) Unknown
34. Origin of Fire 0  
 (0) No fire  
 (1) Vehicle exterior (front, side, back, top)  
 (2) Exhaust system  
 (3) Fuel tank (and other fuel retention system parts)  
 (4) Engine compartment  
 (5) Cargo/trunk compartment  
 (6) Instrument panel  
 (7) Passenger compartment area  
 (8) Other location (specify): \_\_\_\_\_  
 (9) Unknown

39. Location of Fuel Tank-1 4
40. Location of Fuel Tank-2 0  
 (0) No fuel tank  
 (1) Aft of center of the rear wheels (rear axle) centered  
 (2) Aft of center of the rear wheels (rear axle) left side  
 (3) Aft of center of the rear wheels (rear axle) right side  
 (4) Forward of center of the rear wheels (rear axle) centered  
 (5) Forward of center of the rear wheels (rear axle) left side  
 (6) Forward of center of the rear wheels (rear axle) right side  
 (7) Over center of the rear wheels (rear axle)  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

41. Damage to Fuel Tank-1 1
42. Damage to Fuel Tank-2 0  
 (0) No fuel tank  
 (1) No damage to fuel tank  
 (2) Deformed, no seam failure  
 (3) Deformed, with a seam failure  
 (4) Punctured  
 (5) Lacerated (ripped)  
 (6) Abraded (scraped)  
 (7) Filler neck separation from the fuel tank  
 (8) Other damage (specify): \_\_\_\_\_  
 (9) Unknown



43. Leakage Location of Fuel System-1

1

44. Leakage Location of Fuel System-2

0

(0) No fuel tank

(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify): \_\_\_\_\_

(9) Unknown

45. Fuel Type-1

01

46. Fuel Type-2

00*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify): \_\_\_\_\_

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify): \_\_\_\_\_

(98) Other Hybrid (specify): \_\_\_\_\_

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks?

0

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*(1) Yes -- no damage to any tank or filler cap and no fuel system leakage(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): \_\_\_\_\_(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank \_\_\_\_\_

Tank location \_\_\_\_\_

Filler cap location \_\_\_\_\_

Tank damage \_\_\_\_\_

Location of leakage \_\_\_\_\_

Type of fuel \_\_\_\_\_

(9) Unknown if more than two tanks

**COMMENTS**


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\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED \*\*\*

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10

2. Case Number - Stratum 9618

3. Vehicle Number 01

## INTEGRITY

4. Passenger Compartment Integrity 00  
(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (06) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):

(99) Unknown

Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H 0

- (0) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):

(9) Unknown

Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 \* 2, Then code Ø

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

- (0) No door/gate/hatch or door not opened

Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):

(9) Unknown

## GLAZING

Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2  
20. BL 2 21. Roof 0 22. Other 2

- (0) No glazing
- (1) AS-1 - Laminated
- (2) AS-2 - Tempered
- (3) AS-3 - Tempered-tinted (original)
- (4) AS-2 - Tempered-with after market tint
- (5) AS-3 - Tempered-tinted (with additional after market tint)
- (6) AS-14 - Glass/Plastic
- (7) Glazing removed prior to accident
- (8) Other (specify):

(9) Unknown

Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2  
28. BL 1 29. Roof 0 30. Other 1

- (0) No glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (7) Glazing removed prior to accident
- (9) Unknown

Glazing Damage from Impact Forces

31. WS 2 32. LF 1 33. RF 1 34. LR 1 35. RR 1  
36. BL 1 37. Roof 0 38. Other 1

- (0) No glazing
- (1) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (9) Unknown if damaged

Glazing Damage from Occupant Contact

39. WS 1 40. LF 1 41. RF 1 42. LR 1 43. RR 1  
44. BL 1 45. Roof 0 46. Other 1

- (0) No glazing
- (1) No occupant contact to glazing
- (2) Glazing contacted by occupant but no glazing damage
- (3) Glazing in place and cracked by occupant contact
- (4) Glazing in place and holed by occupant contact
- (5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (6) Glazing out-of-place by occupant contact and holed by occupant contact
- (7) Glazing removed prior to accident
- (8) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant

## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE	—	DAMAGE VALUE	=	DEFORMATION
10cm	—	5cm	=	5cm
	—		=	
	—		=	
	—		=	

Front  
of Rim to Dash 5cm = 2"

NOTE: The 5cm Rim movement most likely  
a result of shear capsule movement  
not deformation from driver contact  
Although top half of Rim appears bent



## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

## LOCATION OF INTRUSION

## Front Seat

- (11) Left  
(12) Middle  
(13) Right

## Second Seat

- (21) Left  
(22) Middle  
(23) Right

## Third Seat

- (31) Left  
(32) Middle  
(33) Right

## Fourth Seat

- (41) Left  
(42) Middle  
(43) Right

- (97) Catastrophic  
(98) Other enclosed area (specify) \_\_\_\_\_

- (99) Unknown

## INTRUDING COMPONENT

## Interior Components

- (01) Steering assembly  
(02) Instrument panel left  
(03) Instrument panel center  
(04) Instrument panel right  
(05) Toe pan  
(06) A (A1/A2)-pillar  
(07) B-pillar  
(08) C-pillar  
(09) D-pillar  
(10) Side panel - forward of the A1/A2-pillar  
(11) Door panel (side)  
(12) Side panel - rear of the B-pillar  
(13) Roof (or convertible top)  
(14) Roof side rail  
(15) Windshield  
(16) Windshield header  
(17) Window frame  
(18) Floor pan (includes sill)  
(19) Backlight header  
(20) Front seat back  
(21) Second seat back  
(22) Third seat back  
(23) Fourth seat back  
(24) Fifth seat back  
(25) Seat cushion  
(26) Back door/panel (e.g., tailgate)  
(27) Other interior component (specify): \_\_\_\_\_

## Exterior Components

- (30) Hood  
(31) Outside surface of this vehicle (specify): \_\_\_\_\_  
(32) Other exterior object in the environment (specify): \_\_\_\_\_  
(33) Unknown exterior object  
(97) Catastrophic  
(98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_  
(99) Unknown

## MAGNITUDE OF INTRUSION

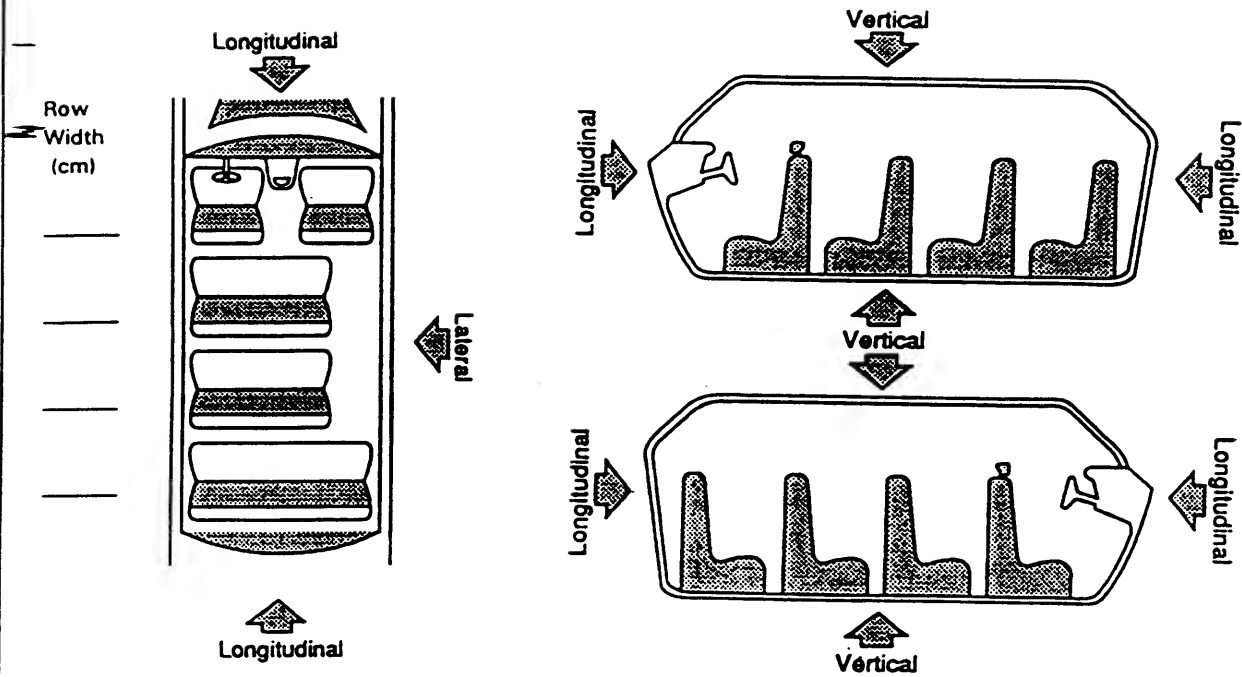
- (1)  $\geq 3$  centimeters but  $< 8$  centimeters  
(2)  $\geq 8$  centimeters but  $< 15$  centimeters  
(3)  $\geq 15$  centimeters but  $< 30$  centimeters  
(4)  $\geq 30$  centimeters but  $< 46$  centimeters  
(5)  $\geq 46$  centimeters but  $< 61$  centimeters  
(6)  $\geq 61$  centimeters  
(7) Catastrophic  
(9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical  
(2) Longitudinal  
(3) Lateral  
(7) Catastrophic  
(9) Unknown

# INTRUSION WORKSHEET

**NOTE: SKETCH INTRUDED AREAS**



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	INTRUSION	
		-		=	
		No INTRUSIONS			
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	

Document no more than the 15 most severe intrusions

**STEERING COLUMN****INSTRUMENT PANEL**87. Steering Column Type 2

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_

(9) Unknown

88. Tilt Steering Column Adjustment 1

- (0) No tilt steering column  
 (1) Full up  
 (2) Between full up and center  
 (3) Center  
 (4) Between center and full down  
 (5) Full down  
 (9) Unknown

89. Telescoping Steering Column Adjustment 0

- (0) No telescoping steering column  
 (1) Full back  
 (2) Between full back and midpoint  
 (3) Midpoint  
 (4) Between midpoint and full forward  
 (5) Full forward  
 (9) Unknown

90. Steering Rim/Spoke Deformation 05

- Code actual measured  
 deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

91. Location of Steering Rim/Spoke Deformation 01

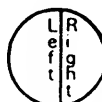
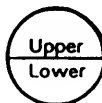
(00) No steering rim deformation

*Quarter Sections*

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D

*Half Sections*

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

92. Odometer Reading 054,000

\_\_\_\_\_ kilometers

Code to the nearest 1,000 kilometers

- (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown

33,295 miles X 1.6093 = 53,583 kilometersSource: ODOMETER93. Instrument Panel Damage from Occupant Contact? 0

- (0) No  
 (1) Yes  
 (9) Unknown

94. Type of Knee Bolster Covering 2

- (0) No knee bolster  
 (1) Padded  
 (2) Rigid plastic  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

95. Knee Bolsters Deformed from Occupant Contact? 1

- (0) No knee bolster  
 (1) No deformation  
 (2) Yes - deformation  
 (9) Unknown

96. Did Glove Compartment Door Open During Collision(s)? 2

- (0) No glove compartment door  
 (1) No - door did not open  
 (2) Yes - door opened  
 (9) Unknown

97. Adaptive (Assistive) Driving Equipment 0

- (0) No adaptive driving equipment  
 (1) Adaptive driving equipment installed  
 (Check all that apply.)  
☐ Hand controls for braking/acceleration  
☐ Steering control devices (attached to OEM steering wheel)  
☐ Steering knob attached to steering wheel  
☐ Low effort power steering (unit or device)  
☐ Replacement steering wheel (i.e., reduced diameter)  
☐ Joy-stick steering controls  
☐ Wheelchair tie-downs  
☐ Modification to seat belts (specify): \_\_\_\_\_  
☐ Additional or relocated switches (specify): \_\_\_\_\_  
☐ Raised roof  
☐ Wall-mounted head rest (used behind wheelchair)  
☐ Other adaptive device (specify): \_\_\_\_\_

(9) Unknown



# FIRST SEAT FRONTAL AIR BAGS

NOTES: Encode the applicable data for the driver and first seat passenger in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	1	1
B-Flaps open at tear points?	2	2
C-Flaps damaged?	1	2
D-Air bag damaged?	01	01
E-Source of air bag damage	01	01
F-Air bag tethered?	1	2
G-Air bag have vent ports?	2	2
H-Other occupant contact air bag?	1	1
I-Occupant wearing eyewear?	1	1

## A-Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

## B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes - PARTIALLY - DRIVER
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## C-Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify): CUT SCRAPES
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## D-Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):

- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## F-Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps): 1
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## G-Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports): 2 2
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

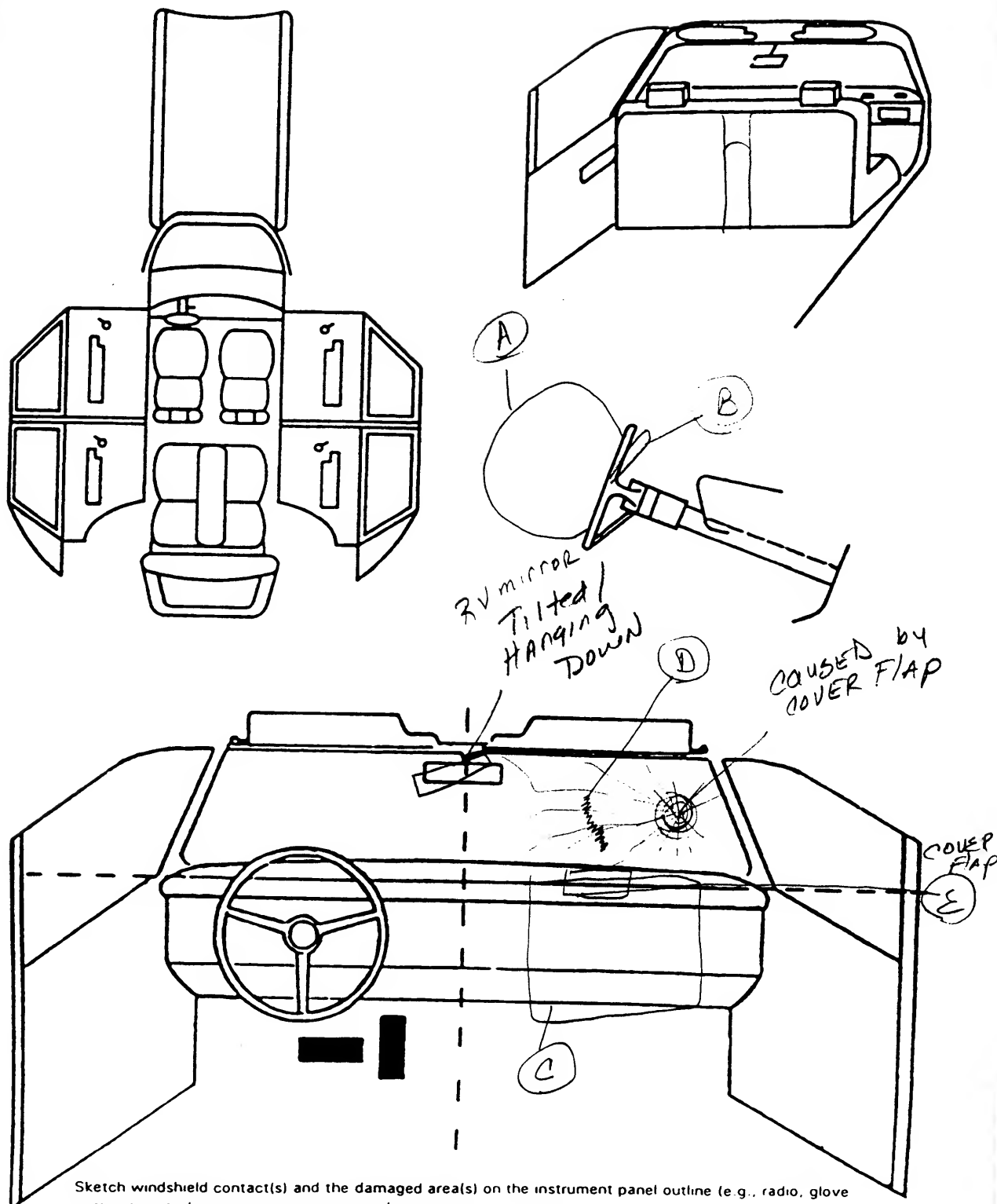
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## I-Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## VEHICLE INTERIOR SKETCHES

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	170	1	FACE	OIL / SKIN	1
B	004			AIR bag deployment force	N/A
C	180	2	FACE	SKIN, HAIR, OIL	1
D	001			COVER FLAP transfer	N/A
E	185	2	mouth	SKIN ON leading EDGE	2
F					
G					
H					
I					
J					
K					
L					
M					
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Survivor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment (e.g., tapedeck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object, (specify):  
 (019) Other front object (specify):

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):

## AIR BAG

- (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify):

- (195) Other air bag compartment cover (specify):

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown



## National Accident Sampling System-Crashworthiness Data System: Interior Vehicle Form

Page 6

**AUTOMATIC RESTRAINTS**

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

**AIR BAGS**

		Frontal Air Bags--Left Front	Frontal Air Bags-Right Front	Other Air Bag
F I R S T	Availability/Function			
	Deployment			
	Failure			

**Air Bag System Availability/Function**

(0) Not equipped/not available

(1) Air bag

*Non-functional*

(2) Air bag disconnected (specify): \_\_\_\_\_

(3) Air bag not reinstalled

(9) Unknown

**Air Bag System Deployment****(This Occupant Position)**

(0) Not equipped/not available

(1) Deployed during accident (as a result of impact)

(2) Deployed inadvertently just prior to accident

(3) Deployed, accident sequence undetermined

(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)

(5) Unknown if deployed

(7) Nondeployed

(9) Unknown

**Are There Indications of Air Bag****System Failure? (This Occupant Position)**

(0) Not equipped/not available

(1) No

(2) Yes (specify): \_\_\_\_\_

(9) Unknown

**AUTOMATIC BELTS**

		Left	Right
F I R S T	A-Availability/Function	0	0
	B-Use	0	0
	C-Type	0	0
	D-Proper Use	0	0
	E-Failure Modes	0	0

**A-Automatic (Passive) Belt System Availability/Function**

(0) Not equipped/not available

(1) 2 point automatic belts

(2) 3 point automatic belts

(3) Automatic belts - type unknown

*Non-functional*

(4) Automatic belts destroyed or rendered inoperative

(9) Unknown

**B-Automatic (Passive) Belt System Use**

(0) Not equipped/not available/destroyed or rendered inoperative

(1) Automatic belt in use

(2) Automatic belt not in use (manually disconnected, motorized track inoperative)

(3) Automatic belt use unknown

(9) Unknown

**C-Automatic (Passive) Belt System Type**

(0) Not equipped/not available

(1) Non-motorized system

(2) Motorized system

(9) Unknown

**D-Proper Use of Automatic (Passive) Belt System**

(0) Not equipped/not available/not used

(1) Automatic belt used properly

(2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

(3) Automatic shoulder belt worn under arm

(4) Automatic shoulder belt worn behind back

(5) Automatic belt worn around more than one person

(6) Lap portion of automatic belt worn on abdomen

(7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly

with child safety seat (specify). \_\_\_\_\_

(8) Other improper use of automatic belt system (specify): \_\_\_\_\_

(9) Unknown

**E-Automatic (Passive) Belt Failure Modes During Accident**

(0) Not equipped/not available/not in use

(1) No automatic belt failure(s)

(2) Torn webbing (stretched webbing not included)

(3) Broken buckle or latchplate

(4) Upper anchorage separated

(5) Other anchorage separated (specify): \_\_\_\_\_

(6) Broken retractor

(7) Combination of above (specify): \_\_\_\_\_

(8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown

# MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

— If a child safety seat is present, encode the data on the back of this page 11.

If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
FIRST	A-Availability	4	3	4
	B-Evidence of usage	04	00	04
	C-Used in this crash?	00	00	04
	D-Proper Use	0	0	1
	E-Failure Modes	1	0	1
	F-Anchorage Adjustment	4	0	3
SECOND	A-Availability	4	3	4
	B-Evidence of usage	04	00	04
	C-Used in this crash?	00	00	04
	D-Proper Use	0	0	1
	E-Failure Modes	0	0	1
	F-Anchorage Adjustment	1	0	1
OTHER	A-Availability			
	B-Evidence of usage			
	C-Used in this crash?			
	D-Proper Use			
	E-Failure Modes			
	F-Anchorage Adjustment			

## A-Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

## B/C-Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

## D-Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

### Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):

(9) Unknown

## E-Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

## F-Shoulder Belt Upper Anchorage Adjustment

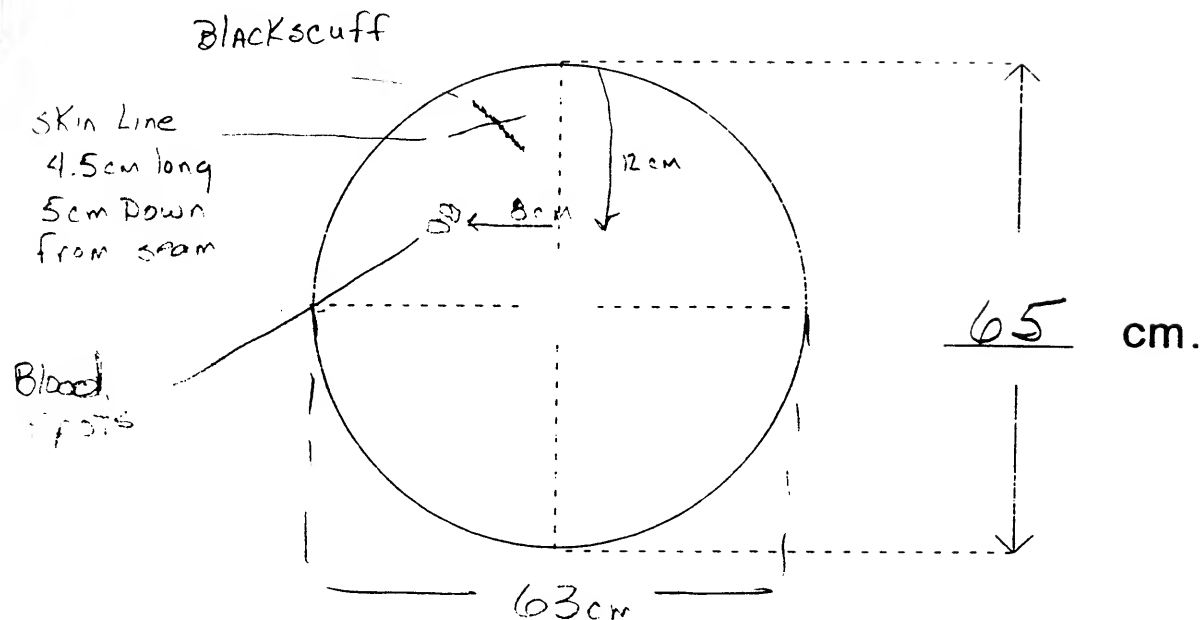
- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

### Adjustable shoulder Belt Upper Anchorage

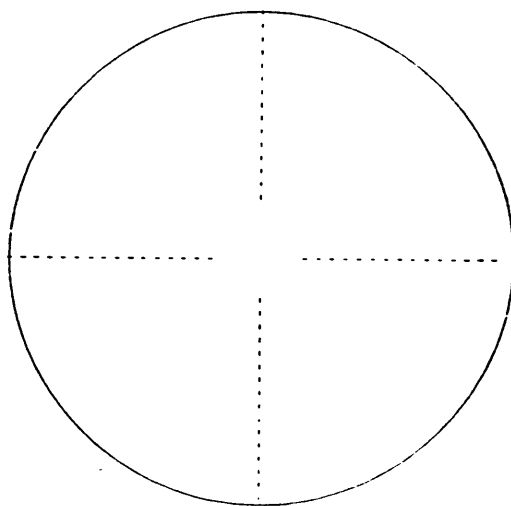
- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

## DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES

## 1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)



## 2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)



Distance  
from seat back  
(center) to SW Hub  
51 cm

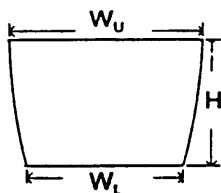


## DRIVER AIR BAG SKETCHES (Cont'd)

## 3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_

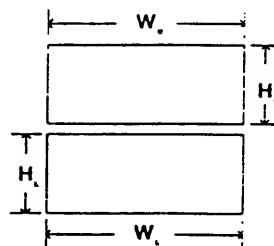
height (H) \_\_\_\_\_



## 4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

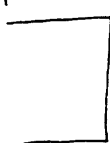
a. Upper Flap

b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_height ( $H_U$ ) \_\_\_\_\_ height ( $H_L$ ) \_\_\_\_\_

## 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

3" in.  
7.5cm



11.5cm  
4.5" in

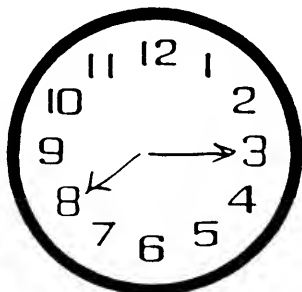
Both flaps same size

## 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

Left cover is  
not completely  
torn open

4cm left unopen / torn open  
during deployment.

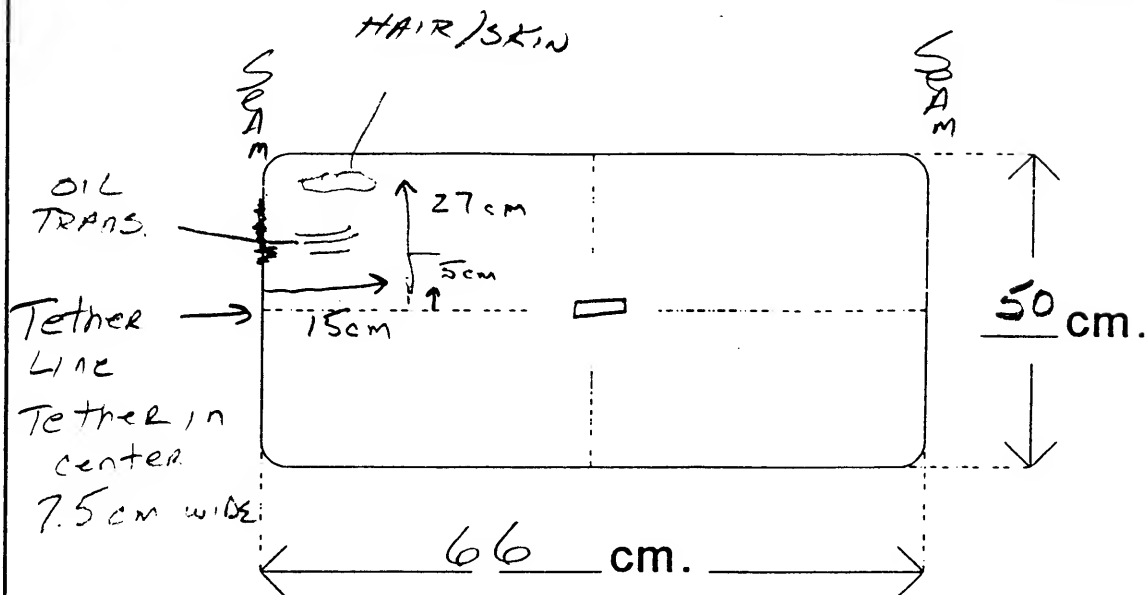
## 7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



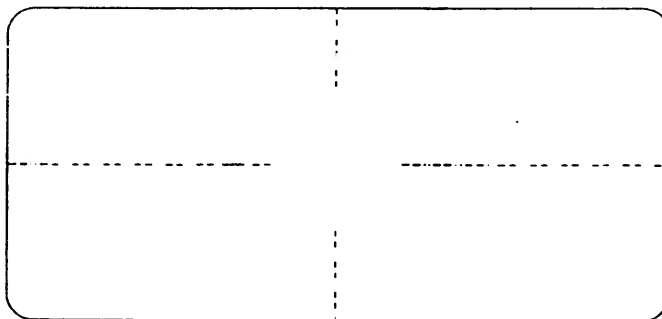
Both  
vent Hole  
DIAM 3cm

## PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES

## 1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)



## 2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)



Dist. from Leading  
edge of Dash to  
deployment door 1cm

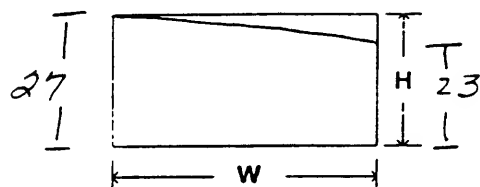
Distance  
from seatback  
(center) to Dash  
77cm

## PASSENGER AIR BAG SKETCHES (Cont'd)

## 3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W) 39

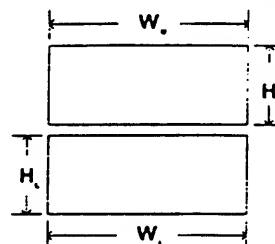
height (H) \_\_\_\_\_



## 4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

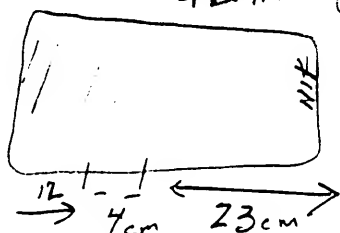
a. Upper Flap

b. Lower Flap

width ( $W_u$ ) \_\_\_\_\_width ( $W_l$ ) \_\_\_\_\_height ( $H_u$ ) \_\_\_\_\_height ( $H_l$ ) \_\_\_\_\_

## 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

striations/gouges  
from WS

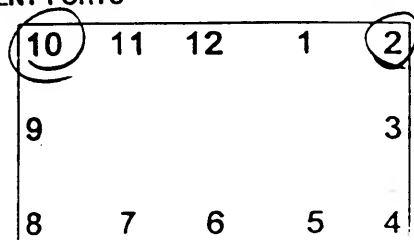


AREA of suspected  
contact. SEE photos

## 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

Lamination  
transfers  
to cover flap

## 7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



Both vent  
DIAMS.  
3 cm

TOP mounted  
AIR BAG



**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

**"OTHER" AIR BAG SKETCHES (Cont'd)**

**3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG**

**4. SKETCH AIR BAG VENT PORTS**

**HEAD RESTRAINTS/SEAT EVALUATION**

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
<b>FIRST</b>	A-Head Restraint Type/Damage	3	0	3
	B-Seat Type	06	06	06
	C-Seat Orientation	1	1	1
	D-Seat Track Position	2	2/3	3
	E-Seat Back Incline Pre/Post Impact	23		23
	F-Seat Performance	1		1
<b>SECOND</b>	A-Head Restraint Type/Damage	0	0	0
	B-Seat Type	03	03	03
	C-Seat Orientation	1	1	1
	D-Seat Track Position	1	1	1
	E-Seat Back Incline Pre/Post Impact	01	01	01
	F-Seat Performance	1	1	1
<b>THIRD</b>	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
<b>OTHER</b>	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

**DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)**



no child seat present during inspection

## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation						
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					
<div style="display: flex; justify-content: space-between;"> <div style="width: 48%;"> <p><b>1. Type of Child Safety Seat</b></p> <p>(0) No child safety seat            (1) Infant seat            (2) Toddler seat            (3) Convertible seat            (4) Booster seat            (7) Other type child safety seat (specify): _____            (8) Unknown child safety seat type            (9) Unknown if child safety seat used</p> <p><b>2. Child Safety Seat Orientation</b></p> <p>(00) No child safety seat            Designed for Rear Facing for This Age/Weight            (01) Rear facing            (02) Forward facing            (08) Other orientation (specify): _____            (09) Unknown orientation</p> <p>Designed for Forward Facing for This Age/Weight            (11) Rear facing            (12) Forward facing            (18) Other orientation (specify): _____            (19) Unknown orientation</p> <p>Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight            (21) Rear facing            (22) Forward facing            (28) Other orientation (specify): _____            (29) Unknown orientation</p> <p>(99) Unknown if child safety seat used</p> </div> <div style="width: 48%;"> <p><b>3. Child Safety Seat Harness Usage</b></p> <p><b>4. Child Safety Seat Shield Usage</b></p> <p><b>5. Child Safety Seat Tether Usage</b>            Note: Options Below Are Used for Variables 3-5.            (00) No child safety seat</p> <p>Not Designed with Harness/Shield/Tether            (01) After market harness/shield/tether added, not used            (02) After market harness/shield/tether used            (03) Child safety seat used, but no after market harness/shield/tether added            (09) Unknown if harness/shield/tether added or used</p> <p>Designed With Harness/Shield/Tether            (11) Harness/shield/tether not used            (12) Harness/shield/tether used            (19) Unknown if harness/shield/tether used</p> <p>Unknown If Designed With Harness/Shield/Tether            (21) Harness/shield/tether not used            (22) Harness/shield/tether used            (29) Unknown if harness/shield/tether used</p> <p>(99) Unknown if child safety seat used</p> <p><b>6. Child Safety Seat Make/Model</b>            (Specify make/model and occupant number)</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>_____</p> </div> </div>						

**HEAD RESTRAINTS/SEAT EVALUATION****A-Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**B-Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): \_\_\_\_\_
- (99) Unknown

**C-Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**D-Seat Track Adjusted Position Prior To Impact**

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

**Adjustable Seat Track**

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

**E-Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable

**Upright prior to impact**

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

**Slightly reclined prior to impact**

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

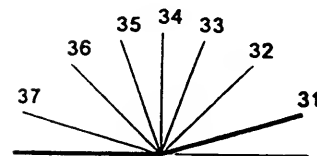
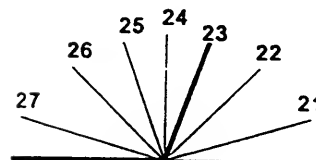
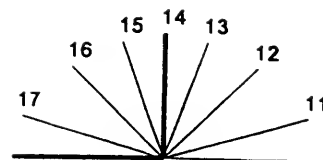
**Completely reclined prior to impact**

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position

- (99) Unknown

**F-Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No [☒] Yes [ ]

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection  
(2) Partial ejection  
(3) Ejection, Unknown degree  
(9) Unknown

**Ejection Area**

- (1) Windshield  
(2) Left front  
(3) Right front  
(4) Left rear  
(5) Right rear  
(6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):  
\_\_\_\_\_

**(9) Unknown****Ejection Medium**

- (1) Door/hatch/tailgate  
(2) Nonfixed roof structure  
(3) Fixed glazing  
(4) Nonfixed glazing (specify):  
\_\_\_\_\_

**(5) Integral structure**

- (8) Other medium (specify):  
\_\_\_\_\_

**(9) Unknown****Medium Status (Immediately Prior to Impact)**

- (1) Open  
(2) Closed  
(3) Integral structure  
(9) Unknown

**ENTRAPMENT** No [☒] Yes [ ]

Describe entrapment mechanism: \_\_\_\_\_

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Component(s): \_\_\_\_\_

(Note on vehicle interior sketch)



**NASS CDS VEHICLE FORMS: VEHICLE #2**



## GENERAL VEHICLE FORM

1. Primary Sampling Unit Number

2. Case Number - Stratum

3. Vehicle Number

### VEHICLE IDENTIFICATION

4. Vehicle Model Year  
Code the last two digits of the model year  
(99) Unknown

5. Vehicle Make (specify):  
Chevrolet  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

6. Vehicle Model (specify):  
CORVETTE  
Applicable codes are found in your  
NASS Data Collection, Coding and  
Editing Manual.  
(99) Unknown

7. Body Type  
Note: Applicable codes may be found on  
the back of this page.

8. Vehicle Identification Number

1G1LT5116JE  
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17  
Left justify; Slash zeros and letter Z (0 and Z)  
No VIN—Code all zeros  
Unknown—Code all nines

9. Vehicle Special Use (This Trip)

- (0) No special use  
(1) Taxi  
(2) Vehicle used as school bus  
(3) Vehicle used as other bus  
(4) Military  
(5) Police  
(6) Ambulance  
(7) Fire truck or car  
(8) Other (specify):  
(9) Unknown

### OFFICIAL RECORDS

10. Police Reported Vehicle Disposition  
(0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

11. Police Reported Travel Speed  
Code to the nearest kmph (NOTE: 000 means  
less than 0.5 kmph)  
(160) 159.5 kmph and above  
(999) Unknown

30 mph X 1.6093 = \_\_\_\_\_ kmph

12. Speed Limit

(000) No statutory limit

Code posted or statutory speed limit in kmph  
(999) Unknown

55 mph X 1.6093 = \_\_\_\_\_ kmph

13. Police Reported Alcohol Presence For Driver

- (0) No alcohol present  
(1) Yes alcohol present  
(7) Not reported  
(8) No driver present  
(9) Unknown

14. Alcohol Test Result For Driver  
Code actual value (decimal implied  
before first digit—0.xx)

- (95) Test refused  
(96) None given  
(97) AC test performed, results unknown  
(98) No driver present  
(99) Unknown

Source: PAR

15. Police Reported Other Drug Presence For Driver

- (0) No other drug(s) present  
(1) Yes other drug(s) present  
(7) Not reported  
(8) No driver present  
(9) Unknown

16. Other Drug Specimen Test Result For Driver

- (0) No specimen test given  
(1) Drug(s) not found in specimen  
(2) Drug(s) found in specimen, (specify):  
(3) Specimen test given, results unknown or not  
obtained  
(8) No driver present  
(9) Unknown if specimen test given

17. Driver's Zip Code

(00001) Driver not a resident of U.S. or territories

Code actual 5-digit zip code

- (99998) No driver present  
(99999) Unknown

18. Driver's Race/Ethnic Origin

- (1) White (non-Hispanic)  
(2) Black (non-Hispanic)  
(3) White (Hispanic)  
(4) Black (Hispanic)  
(5) American Indian, Eskimo or Aleut  
(6) Asian or Pacific Islander  
(7) Other (specify):

- (8) No driver present  
(9) Unknown

## CODES FOR BODY TYPE

## CDS APPLICABLE VEHICLES

**Automobiles**

- (01) Convertible (excludes sun-roof, t-bar)
- (02) 2-door sedan, hardtop, coupe
- (03) 3-door/2-door hatchback
- (04) 4-door sedan, hardtop
- (05) 5-door/4-door hatchback
- (06) Station wagon (excluding van and truck based)
- (07) Hatchback, number of doors unknown
- (08) Other automobile type (specify): \_\_\_\_\_
- (09) Unknown automobile type

**Automobile Derivatives**

- (10) Auto based pickup (includes El Camino, Caballero, Ranchero, Brat, and Rabbit pickup)
- (11) Auto based panel (cargo station wagon, auto based ambulance/hearse)
- (12) Large limousine - more than four side doors or stretched chassis
- (13) Three-wheel automobile or automobile derivative

**Utility Vehicles ( $\leq 4,536$  kgs GVWR)**

- (14) Compact utility (Jeep CJ-2 - CJ-7, Scrambler, Golden Eagle, Renegade, Laredo, Wrangler, Cherokee [84 and after], Dispatcher, Raider, Bronco II, Bronco [76 and before], Explorer, S-10 Blazer, Geo Tracker, Bravada, S-15 Jimmy, Thing, Pathfinder, Trooper, Trooper II, Rodeo, Amigo, Navajo, 4-Runner, Montero, Passport, Samurai, Sidekick, Rocky)
- (15) Large utility (includes Jeep Cherokee [83 and before], Ramcharger, Trailduster, Bronco-fullsize [78 and after], fullsize Blazer, fullsize Jimmy, Hummer, Landcruiser, Rover, Scout, Yukon)
- (16) Utility station wagon (Chevy Suburban, GMC Suburban, Travelall, Grand Wagoneer, includes suburban limousine)
- (19) Utility, unknown body type

**Van Based Light Trucks ( $\leq 4,536$  kgs GVWR)**

- (20) Minivan (Town and Country, Caravan, Grand Caravan, Voyager, Grand Voyager, Mini-Ram, Vista, Aerostar, Windstar, Villager, Lumina APV, Trans Sport, Silhouette, Astro, Safari, Toyota Van, Toyota Minivan, Previa, Nissan Minivan, Quest, Mitsubishi Minivan, Expo Wagon, Vanagon/Camper.)
- (21) Large van (B150-B350, Sportsman, Royal, Maxiwagon, Ram, Tradesman, Voyager [83 and before], E150-E350, Econoline, Clubwagon, Chateau, G10-G30, Chevy Van, Beauville, Sport Van, G15-G35, Rally Van, Vandura.)
- (22) Step van or walk-in van ( $\leq 4,536$  kgs GVWR)
- (23) Van based motorhome ( $\leq 4,536$  kgs GVWR)
- (24) Van based school bus ( $\leq 4,536$  kgs GVWR)
- (25) Van based other bus ( $\leq 4,536$  kgs GVWR)
- (28) Other van type (Hi-Cube Van, Kary) (specify): \_\_\_\_\_
- (29) Unknown van type

**Light Conventional Trucks (Pickup style cab,  $\leq 4,536$  kgs GVWR)**

- (30) Compact pickup (D50, Colt P/U, Ram 50, Dakota, Arrow Pickup [foreign], Ranger, Courier, S-10, T-10, LUV, S-15, T-15, Sonoma, Datsun/Nissan Pickup, P'up, Mazda Pickup, Toyota Pickup, Mitsubishi Pickup)
- (31) Large Pickup (Jeep Pickup, Comanche, Ram Pickup, D100-D350, W100-W350, F100-F350, C10-C35, K10-K35, R10-R35, V10-V35, Silverado, Sierra, R100-R500, T100)
- (32) Pickup with slide-in camper
- (33) Convertible pickup
- (39) Unknown pickup style light conventional truck type

**Other Light Trucks ( $\leq 4,536$  kgs GVWR)**

- (40) Cab chassis based (includes rescue vehicles, light stake, dump, and tow truck)
- (41) Truck based panel
- (42) Light truck based motorhome (chassis mounted)
- (45) Other light conventional truck type
- (48) Unknown light truck type
- (49) Unknown light vehicle type (automobile, utility, van, or light truck)

## OTHER VEHICLES

**Buses (Excludes Van Based)**

- (50) School bus (designed to carry students, not cross country or transit)
- (58) Other bus type (e.g., transit, intercity, bus based motorhome) (specify): \_\_\_\_\_
- (59) Unknown bus type

**Medium/Heavy Trucks ( $> 4,536$  kgs GVWR)**

- (60) Step van ( $> 4,536$  kgs GVWR)
- (61) Single unit straight truck ( $4,536$  kgs  $<$  GVWR  $\leq 8,845$  kgs)
- (62) Single unit straight truck ( $8,845$  kgs  $<$  GVWR  $\leq 11,793$  kgs)
- (63) Single unit straight truck ( $> 11,793$  kgs GVWR)
- (64) Single unit straight truck, GVWR unknown
- (65) Medium/heavy truck based motorhome
- (67) Truck-tractor with no cargo trailer
- (68) Truck-tractor pulling one trailer
- (69) Truck-tractor pulling two or more trailers
- (70) Truck-tractor (unknown if pulling trailer)
- (78) Unknown medium/heavy truck type
- (79) Unknown truck type (light/medium/heavy)

**Motored Cycles (Does Not Include All-Terrain Vehicles/Cycles)**

- (80) Motorcycle
- (81) Moped (motorized bicycle)
- (82) Three-wheel motorcycle or moped
- (88) Other motored cycle (minibike, motorscooter) (specify): \_\_\_\_\_
- (89) Unknown motored cycle type

**Other Vehicles**

- (90) ATV (All-Terrain Vehicle) and ATC (All-Terrain Cycle)
- (91) Snowmobile
- (92) Farm equipment other than trucks
- (93) Construction equipment other than trucks
- (97) Other vehicle type
- (99) Unknown body type



**PRECRASH ENVIRONMENTAL DATA**

19. Relation To Interchange Or Junction 2  
 (0) Non-interchange area and non-junction  
 (1) Interchange area related

*Non-Interchange junctions*

- (2) Intersection related  
 (3) Driveway, alley access related  
 (4) Other junction (specify) \_\_\_\_\_

(5) Unknown type of junction \_\_\_\_\_

(9) Unknown

20. Trafficway Flow 0  
 (0) Not physically divided (two way traffic)  
 (1) Divided trafficway-median strip without positive barrier  
 (2) Divided trafficway-median strip with positive barrier  
 (3) One way traffic  
 (9) Unknown

21. Number Of Travel Lanes 2  
 (1) One  
 (2) Two  
 (3) Three  
 (4) Four  
 (5) Five  
 (6) Six  
 (7) Seven or more  
 (9) Unknown

22. Roadway Alignment 2  
 (1) Straight  
 (2) Curve right  
 (3) Curve left  
 (9) Unknown

23. Roadway Profile 1 *.7 uphill*  
 (1) Level  
 (2) Uphill grade (> 2%)  
 (3) Hill crest  
 (4) Downhill grade (> 2%)  
 (5) Sag  
 (9) Unknown

24. Roadway Surface Type 4  
 (1) Concrete  
 (2) Bituminous (asphalt)  
 (3) Brick or block  
 (4) Slag, gravel, or stone  
 (5) Dirt  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

25. Roadway Surface Condition 1

- (1) Dry  
 (2) Wet  
 (3) Snow or slush  
 (4) Ice  
 (5) Sand, dirt, or oil  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

26. Light Conditions 1

- (1) Daylight  
 (2) Dark  
 (3) Dark, but lighted  
 (4) Dawn  
 (5) Dusk  
 (9) Unknown

27. Atmospheric Conditions 0

- (0) No adverse atmospheric-related driving conditions  
 (1) Rain  
 (2) Sleet/hail  
 (3) Snow  
 (4) Fog  
 (5) Rain and fog  
 (6) Sleet and fog  
 (7) Other (e.g., smog, smoke, blowing sand or dust, etc.) (specify): \_\_\_\_\_  
 (9) Unknown

28. Traffic Control Device 0

- (0) No traffic control(s)  
 (1) Traffic control signal (not RR crossing)

*Regulatory*

- (2) Stop sign  
 (3) Yield sign  
 (4) School zone sign  
 (5) Other regulatory sign (specify): \_\_\_\_\_

- (6) Warning sign (not RR crossing)  
 (7) Unknown sign  
 (8) Miscellaneous/other controls including RR controls (specify): \_\_\_\_\_

(9) Unknown

29. Traffic Control Device Functioning 0

- (0) No traffic control device  
 (1) Traffic control device not functioning (specify): \_\_\_\_\_  
 (2) Traffic control device functioning properly  
 (9) Unknown

**PRECRASH DRIVER RELATED DATA**

30. Driver's Distraction/Inattention To Driving (Prior To Recognition Of Critical Event) 01
- (00) No driver present
- (01) Attentive or not distracted
- (02) Looked but did not see
- Distractions*
- (03) By other occupant(s), (specify): \_\_\_\_\_
- (04) By moving object in vehicle (specify): \_\_\_\_\_
- (05) While talking or listening to cellular phone (specify location and type of phone): \_\_\_\_\_
- (06) While dialing cellular phone (specify location and type of phone): \_\_\_\_\_
- (07) While adjusting climate controls
- (08) While adjusting radio, cassette, CD (specify): \_\_\_\_\_
- (09) While using other device/controls integral to vehicle (specify): \_\_\_\_\_
- (10) While using or reaching for device/object brought into vehicle (specify): \_\_\_\_\_
- (11) Sleepy or fell asleep
- (12) Distracted by outside person, object, or event (specify): \_\_\_\_\_
- (13) Eating or drinking
- (14) Smoking related
- (97) Distracted/inattentive, details unknown
- (98) Other, distraction (specify): \_\_\_\_\_
- (99) Unknown

31. Pre-Event Movement (Prior to Recognition of Critical Event) 14
- (00) No driver present
- (01) Going straight
- (02) Decelerating in traffic lane
- (03) Accelerating in traffic lane
- (04) Starting in traffic lane
- (05) Stopped in traffic lane
- (06) Passing or overtaking another vehicle
- (07) Disabled or parked in travel lane
- (08) Leaving a parking position
- (09) Entering a parking position
- (10) Turning right
- (11) Turning left
- (12) Making a U-turn
- (13) Backing up (other than for parking position)
- (14) Negotiating a curve
- (15) Changing lanes
- (16) Merging
- (17) Successful avoidance maneuver to a previous critical event
- (97) Other (specify): \_\_\_\_\_
- (99) Unknown

32. Critical Precrash Event 62**THIS VEHICLE LOSS OF CONTROL DUE TO:**

- (01) Blow out or flat tire
- (02) Stalled engine
- (03) Disabling vehicle failure (e.g., wheel fell off) (specify): \_\_\_\_\_
- (04) Non-disabling vehicle problem (e.g., hood flew up) (specify): \_\_\_\_\_
- (05) Poor road conditions (puddle, pot hole, ice, etc.) (specify): \_\_\_\_\_
- (06) Traveling too fast for conditions
- (08) Other cause of control loss (specify): \_\_\_\_\_
- (09) Unknown cause of control loss

**THIS VEHICLE TRAVELLING**

- (10) Over the lane line on left side of travel lane
- (11) Over the lane line on right side of travel lane
- (12) Off the edge of the road on the left side
- (13) Off the edge of the road on the right side
- (14) End departure
- (15) Turning left at intersection
- (16) Turning right at intersection
- (17) Crossing over (passing through) intersection
- (18) This vehicle decelerating
- (19) Unknown travel direction

**OTHER MOTOR VEHICLE IN LANE**

- (50) Other vehicle stopped
- (51) Traveling in same direction with lower steady speed
- (52) Traveling in same direction while decelerating
- (53) Traveling in same direction with higher speed
- (54) Traveling in opposite direction
- (55) In crossover
- (56) Backing
- (59) Unknown travel direction of other motor vehicle in lane

**OTHER MOTOR VEHICLE ENCROACHING INTO LANE**

- (60) From adjacent lane (same direction)—over left lane line
- (61) From adjacent lane (same direction)—over right lane line
- (62) From opposite direction—over left lane line
- (63) From opposite direction—over right lane line
- (64) From parking lane
- (65) From crossing street, turning into same direction
- (66) From crossing street, across path
- (67) From crossing street, turning into opposite direction
- (68) From crossing street, intended path not known
- (70) From driveway, turning into same direction
- (71) From driveway, across path
- (72) From driveway, turning into opposite direction
- (73) From driveway, intended path not known
- (74) From entrance to limited access highway
- (78) Encroachment by other vehicle—details unknown

**PEDESTRIAN, PEDALCYCLIST, OR OTHER NONMOTORIST**

- (80) Pedestrian in roadway
- (81) Pedestrian approaching roadway
- (82) Pedestrian—unknown location
- (83) Pedalcyclist or other nonmotorist in roadway (specify): \_\_\_\_\_
- (84) Pedalcyclist or other nonmotorist approaching roadway, (specify): \_\_\_\_\_
- (85) Pedalcyclist or other nonmotorist—unknown location (specify): \_\_\_\_\_

**OBJECT OR ANIMAL**

- (87) Animal in roadway
- (88) Animal approaching roadway
- (89) Animal—unknown location
- (90) Object in roadway
- (91) Object approaching roadway
- (92) Object—unknown location
- (98) Other critical precrash event (specify): \_\_\_\_\_
- (99) Unknown

33. Attempted Avoidance Maneuver 06

- (00) No driver present
- (01) No avoidance maneuver
- (02) Braking (no lockup)
- (03) Braking (lockup)
- (04) Braking (lockup unknown)
- (05) Releasing brakes
- (06) Steering left
- (07) Steering right
- (08) Braking and steering left
- (09) Braking and steering right
- (10) Accelerating
- (11) Accelerating and steering left
- (12) Accelerating and steering right
- (98) Other action (specify):

(99) Unknown

34. Pre-Impact Stability 1

- (0) No driver present
- (1) Tracking
- (2) Skidding longitudinally—rotation less than 30 degrees
- (3) Skidding laterally—clockwise rotation
- (4) Skidding laterally—counterclockwise rotation
- (7) Other vehicle loss-of-control (specify):

(9) Precrash stability unknown

35. Pre-Impact Location 1

- (0) No driver present
- (1) Stayed in original travel lane
- (2) Stayed on roadway but left original travel lane
- (3) Stayed on roadway, not known if left original travel lane
- (4) Departed roadway
- (5) Remained off roadway
- (6) Returned to roadway
- (7) Entered roadway
- (9) Unknown

36. Accident Type 52

(Note: Applicable codes on back of this page)

(00) No impact

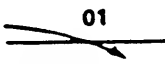

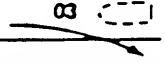
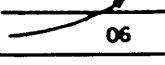
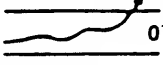
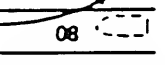
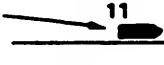

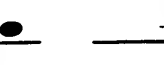
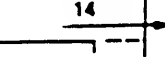

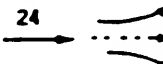
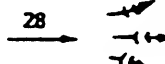
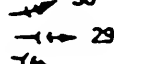



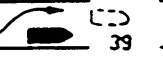
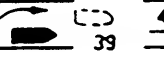
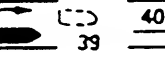
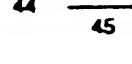
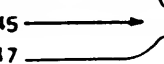
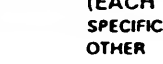
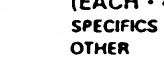
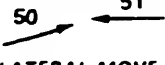
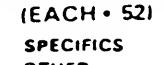

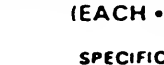

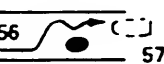
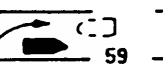
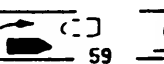
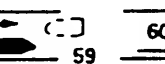

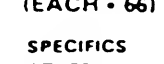
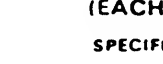
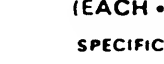
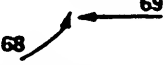







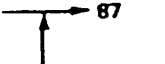


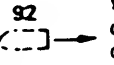
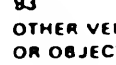



Code the number of the diagram that best describes the accident circumstance

(98) Other accident type (specify):

(99) Unknown

**STOP HERE IF GV07 DOES NOT EQUAL 01 - 49**



Category	Configuration	ACCIDENT TYPES (Includes Intent)				
I Single Driver	A Right Roadside Departure	 01 DRIVE OFF ROAD	 02 CONTROL/ TRACTION LOSS	 03 AVOID COLLISION WITH VEH., PED., ANIM.	04 SPECIFICS OTHER	05 SPECIFICS UNKNOWN
	B Left Roadside Departure	 06 DRIVE OFF ROAD	 07 CONTROL/ TRACTION LOSS	 08 AVOID COLLISION WITH VEH., PED., ANIM.	09 SPECIFICS OTHER	10 SPECIFICS UNKNOWN
	C Forward Impact	 11 PARKED VEH.	 12 STA. OBJECT	 13 PEDESTRIAN/ ANIMAL	 14 END DEPARTURE	15 SPECIFICS OTHER  16 SPECIFICS UNKNOWN
II Same Trafficway Same Direction	D Rear-End	 20 STOPPED 21, 22, 23	 24 SLOWER 25, 26, 27	 28 DECEL. 29, 30, 31	 30 SPECIFICS OTHER	 31 SPECIFICS UNKNOWN
	E Forward Impact	 34 CONTROL/ TRACTION LOSS	 36 CONTROL/ TRACTION LOSS	 38 AVOID COLLISION WITH VEH.	 40 AVOID COLLISION WITH OBJECT	 41 SPECIFICS OTHER  SPECIFICS UNKNOWN
	F Sideswipe Angle	 44 SPECIFICS OTHER	 45 SPECIFICS OTHER	 46 SPECIFICS OTHER	 47 SPECIFICS OTHER	(EACH • 32) (EACH • 33)  (EACH • 42) (EACH • 43)  (EACH • 48) SPECIFICS OTHER  (EACH • 49) SPECIFICS UNKNOWN
III Same Trafficway Opposite Direction	G Head-On	 50 LATERAL MOVE	 51 SPECIFICS OTHER	 52 SPECIFICS UNKNOWN	 53 SPECIFICS UNKNOWN	(EACH • 52) SPECIFICS OTHER  (EACH • 53) SPECIFICS UNKNOWN
	H Forward Impact	 54 CONTROL/ TRACTION LOSS	 56 CONTROL/ TRACTION LOSS	 58 AVOID COLLISION WITH VEH.	 60 AVOID COLLISION WITH OBJECT	 61 SPECIFICS OTHER  SPECIFICS UNKNOWN
	I Sideswipe Angle	 64 LATERAL MOVE	 65 SPECIFICS OTHER	 66 SPECIFICS UNKNOWN	 67 SPECIFICS UNKNOWN	(EACH • 62) (EACH • 63)  (EACH • 66) SPECIFICS OTHER  (EACH • 67) SPECIFICS UNKNOWN
IV Change Trafficway Vehicle Turning	J Turn Across Path	 68 INITIAL OPPOSITE DIRECTIONS	 71 INITIAL SAME DIRECTIONS	 73 SPECIFICS OTHER	 72 SPECIFICS UNKNOWN	(EACH • 74) (EACH • 75)  SPECIFICS OTHER  SPECIFICS UNKNOWN
	K Turn Into Path	 77 TURN INTO SAME DIRECTION	 79 TURN INTO OPPOSITE DIRECTIONS	 81 SPECIFICS OTHER	 83 SPECIFICS UNKNOWN	(EACH • 84) (EACH • 85)  SPECIFICS OTHER  SPECIFICS UNKNOWN
V Intersecting Paths (Vehicle Damage)	L Straight Paths	 86	 88	 89	(EACH • 90) SPECIFICS OTHER	(EACH • 91) SPECIFICS UNKNOWN
VI Miscellaneous	M Backing Etc	 92 BACKING VEH.	 93 OTHER VEH OR OBJECT	 98 Other Accident Type	 99 Unknown Accident Type	 00 No Impact

**OCCUPANT RELATED**

37. Driver Presence in Vehicle 1  
(0) Driver not present  
(1) Driver present  
(9) Unknown
38. Number of Occupants This Vehicle 01  
(00-96) Code actual number of occupants for this vehicle  
(97) 97 or more  
(99) Unknown
39. Number of Occupant Forms Submitted 01

**AIR BAG RELATED**

40. Is this an AOPS Vehicle? 0  
(0) No (includes unknown)  
(1) Yes - researcher determined  
(2) VIN determined air bag system  
(3) VIN determined automatic (passive) belts  
(4) VIN determined air bag and automatic (passive) belts
41. Air Bag(s) Deployment, First Seat Frontal 0  
(0) Not equipped or not available  
(1) No air bags deployed  
*Single Air Bag Vehicle*  
(2) Driver air bag deployed  
(3) Driver air bag, unknown if deployed  
*Multiple Air Bag Vehicle*  
(4) Driver side only deployed  
(5) Passenger side only deployed  
(6) Driver and passenger side deployed  
(7) Driver and passenger side unknown if deployed  
(8) Air bag(s) deployed, details unknown  
(9) Unknown
42. Air Bag(s) Deployment, Other Than First Seat Frontal 0  
(0) Not equipped with an "other" air bag  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, details unknown  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

Specify type of "other" air bag present: \_\_\_\_\_

**VEHICLE WEIGHT ITEMS**

43. Vehicle Curb Weight 1.27 0  
Code weight to nearest 10 kilograms.  
(045) Less than 454 kilograms  
(612) 6,124 kilograms or more  
(999) Unknown  
2800 lbs X .4536 = 1270 kgs

Source: \_\_\_\_\_

44. Vehicle Cargo Weight 0.00 0  
Code weight to nearest 10 kilograms.  
(000) Less than 5 kilograms  
(454) 4,536 kilograms or more  
(999) Unknown  
10 lbs X .4536 = 4.5 kgs

Source: \_\_\_\_\_

**ROLLOVER DATA**

45. Rollover 00  
(00) No rollover (no overturning)  
*Rollover (primarily about the longitudinal axis)*  
(01-16) Code the number of quarter turns  
(17) Rollover, 17 or more quarter turns (specify): \_\_\_\_\_  
(98) Rollover--end-over-end (i.e., primarily about the lateral axis)  
(99) Rollover (overturn), details unknown
46. Rollover Initiation Type 00  
(00) No rollover  
(01) Trip-over  
(02) Flip-over  
(03) Turn-over  
(04) Climb-over  
(05) Fall-over  
(06) Bounce-over  
(07) Collision with another vehicle  
(08) Other rollover initiation type specify): \_\_\_\_\_  
(98) Rollover--end-over-end  
(99) Unknown rollover initiation type
47. Location of Rollover Initiation 0  
(0) No rollover  
(1) On roadway  
(2) On shoulder--paved  
(3) On shoulder--unpaved  
(4) On roadside or divided trafficway median  
(8) Rollover--end-over-end  
(9) Unknown
48. Rollover Initiation Object Contacted 00  
(Note: Applicable codes on back of page)
49. Location on Vehicle Where Initial Principal Tripping Force Is Applied 0  
(0) No rollover  
(1) Wheels/tires  
(2) Side plane  
(3) End plane  
(4) Undercarriage  
(5) Other location on vehicle (specify): \_\_\_\_\_  
(6) Non-contact rollover forces (specify): \_\_\_\_\_  
(8) Rollover--end-over-end  
(9) Unknown
50. Direction of Initial Roll 0  
(0) No rollover  
(1) Roll right - primarily about the longitudinal axis  
(2) Roll left - primarily about the longitudinal axis  
(8) Rollover--end-over-end  
(9) Unknown roll direction

**OVERRIDE/UNDERRIDE (THIS VEHICLE)**51. Front Override/Underride (this Vehicle) 052. Rear Override/Underride (this Vehicle) 0

- (0) No override/underride, or not an end-to-end impact between two CDS applicable vehicles, and no medium/heavy truck or bus underride

*Override (see specific CDC)**(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))*

- (1) 1st CDC  
(2) 2nd CDC  
(3) Other not automated CDC (specify):  
\_\_\_\_\_

*Underride (see specific CDC)**(Between 2 CDS applicable vehicles (Bodytype, GV07 = 1-49))*

- (4) 1st CDC  
(5) 2nd CDC  
(6) Other not automated CDC (specify):  
\_\_\_\_\_

- (7) Medium/heavy truck or bus override (of any configuration)  
(9) Unknown

**HEADING ANGLE AT IMPACT FOR HIGHEST DELTA V**

Values: (000)-(359) Code actual value

- (996) Non-horizontal impact  
(997) Noncollision  
(998) Impact with object  
(999) Unknown

53. Heading Angle For This Vehicle 32054. Heading Angle For Other Vehicle 155**RECONSTRUCTION DATA**55. Towed Trailing Unit 0

- (0) No towed unit  
(1) Yes—towed trailing unit  
(9) Unknown

56. Documentation of Trajectory Data for This Vehicle 0

- (0) No  
(1) Yes

57. Post Collision Condition of Tree or Pole (For Highest Delta V) 0

- (0) Not collision (for highest delta V) with tree or pole  
(1) Not damaged  
(2) Cracked/sheared  
(3) Tilted < 45 degrees  
(4) Tilted ≥ 45 degrees  
(5) Uprooted tree  
(6) Separated pole from base  
(7) Pole replaced  
(8) Other (specify):  
\_\_\_\_\_

(9) Unknown

**ACCIDENT RECONSTRUCTION PROGRAMS HIGHEST DELTA V**58. Basis for Total (Resultant) Delta V (highest) 01

- (00) No vehicle inspection

*Delta V Calculated*

- (01) Reconstruction program—damage only routine  
(02) Reconstruction program—damage and trajectory routine  
(03) Missing vehicle algorithm

*Delta V Not Calculated*

- (04) At least one vehicle (which may be this vehicle) is beyond the scope of an acceptable reconstruction program, regardless of collision conditions.

*All vehicles within scope (CDC applicable) of reconstruction program but one of the collision conditions is beyond the scope of the reconstruction program or other acceptable reconstruction technique, regardless of adequacy of damage data.*

- (05) Rollover  
(06) Other non-horizontal forces  
(07) Sideswipe type damage  
(08) Severe override  
(09) Yielding object  
(10) Overlapping damage  
(11) All vehicle and collision conditions are within scope of one of the acceptable reconstruction programs, but there is insufficient data available, (specify):  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

(98) Other, (specify): \_\_\_\_\_  
\_\_\_\_\_



## COMPUTER GENERATED CRASH SEVERITY

59. Total Delta V

Highest

0 2 323 Nearest kmph (highest)         Nearest kmph (secondary)

(NOTE: 000 means less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

60. Longitudinal Component of Delta V

Highest

+ 0 2 2- 22 Nearest kmph (highest)         Nearest kmph (secondary)

(NOTE: \_000 means greater than  
 -0.5 kmph and less than +0.5 kmph)  
 (±160) ±159.5 kmph and above  
 (\_999) Unknown

61. Lateral Component of Delta V

Highest

+ 0 0 4- 4 Nearest kmph (highest)         Nearest kmph (secondary)

(NOTE: \_000 means greater than -0.5 kmph and  
 less than +0.5 kmph)  
 (±160) ±159.5 kmph and above  
 (\_999) Unknown

62. Energy Absorption

Highest

0 3 0 . 8 0 030,781 Nearest 100 joules (highest)         Nearest 100 joules (secondary)

(NOTE: 0000 means less than 50 joules)  
 (9997) 999,650 joules or more  
 (9999) Unknown

63. Impact Speed

Highest

9 9 8         Nearest kmph (highest)         Nearest kmph (secondary)

(NOTE: 000 means  
 less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (998) Trajectory algorithm not run  
 (999) Unknown

## DELTA V CONFIDENCE LEVEL

64. Confidence In Reconstruction Program Results (For Highest Delta V)

3

- (0) No reconstruction  
 (1) Collision fits model — results appear reasonable  
 (2) Collision fits model — results appear high  
 (3) Collision fits model — results appear low  
 (4) Borderline reconstruction — results appear reasonable

## OTHER SPEED ESTIMATE

65. Barrier Equivalent Speed

Highest

0 2 423.7 Nearest kmph (highest)         Nearest kmph (secondary)

(NOTE: 000 means  
 less than 0.5 kmph)  
 (160) 159.5 kmph and above  
 (999) Unknown

ESTIMATED DELTA V	INSPECTION TYPE
66. Estimated Highest Delta V (Researcher Determined) <u>0</u> (0) Reconstruction Delta V coded  <i>Estimated Delta V</i> (1) Less than 10 kmph (2) ≥ 10 kmph but < 25 kmph (3) ≥ 25 kmph but < 40 kmph (4) ≥ 40 kmph but < 55 kmph (5) ≥ 55 kmph  <i>Other estimates of damage severity</i> (6) Minor (7) Moderate (8) Severe  (9) Unknown	67. Type of Vehicle Inspection <u>3</u> (0) No inspection (1) Vehicle fully repaired-no damage evident (2) Partial inspection (specify): _____ (3) Complete inspection  <b>DELTA V EVENT NUMBER</b>  68. Delta V Event Number <u>1</u> _____ Code the accident event sequence number that resulted in the Delta V that has been coded above for this vehicle (99) Unknown

\*\*\* IF THE CDS APPLICABLE VEHICLE WAS NOT INSPECTED (I.E., GV67 = 0), \*\*\*

DO NOT COMPLETE THE EXTERIOR AND INTERIOR VEHICLE FORMS

\*\*\* IF GV07 DOES NOT EQUAL 01-49, DO NOT COMPLETE \*\*\*

THE EXTERIOR VEHICLE, INTERIOR VEHICLE,  
OCCUPANT ASSESSMENT, AND OCCUPANT INJURY FORMS.



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## EXTERIOR VEHICLE FORM

**NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM**

1. Primary Sampling Unit Number	<u>10</u>	3. Vehicle Number	<u>02</u>
2. Case Number - Stratum	<u>9618</u>	-	

## VEHICLE IDENTIFICATION

VIN 1G1LT5116JE \_\_\_\_\_ Model Year 88  
Vehicle Make (specify): Chevrolet Vehicle Model (specify): CORSICA

## LOCATOR

Locate the end of the damage with respect to the vehicle's damaged center point or bumper corner for end impacts or an undamaged axle for side impacts.

Specific Impact No.	Location of Direct Damage	Location of Field L	Location of Max Crush
01	Ⓡ BC OVER 51 CM	ACROSS front bumper	C-6

### CRUSH PROFILE IN CENTIMETERS

NOTES: Identify the plane at which the C-measurements are taken (e.g., at bumper, above bumper, at sill, above sill, etc.) and label adjustments (e.g., free space).

Measure C1 to C6 from driver to passenger side in front or rear impacts and rear to front in side impacts.

Free space value is defined as the distance between the baseline and the original body contour taken at the individual C locations. This may include the following: bumper lead, bumper taper, side protrusion, side taper, etc. Record the value for each C-measurement and maximum crush.

Use as many lines/columns as necessary to describe each damage profile.

[illegible]



## ORIGINAL SPECIFICATIONS WORK SHEET

Wheelbase 103.4 inches x 2.54 = 262.6 cm  
 Overall Length 183.4 inches x 2.54 = 465.8 cm  
 Maximum Width 68.0 inches x 2.54 = 172.7 cm  
 Curb Weight 2,800 pounds x 0.4536 = 1,270.1 kg  
 Average Track <sup>55.6</sup><sub>55.1</sub> 55.35 inches x 2.54 = 140.6 cm  
 Front Overhang \_\_\_\_\_ inches x 2.54 = \_\_\_\_\_ cm  
 Rear Overhang \_\_\_\_\_ inches x 2.54 = \_\_\_\_\_ cm  
 Undeformed End Width \_\_\_\_\_ inches x 2.54 = \_\_\_\_\_ cm  
 Engine Size: cyl/disl. \_\_\_\_\_ cc x 0.001 = 2.0 L  
 L-4 5-Passenger 121 CID x 0.0164 = 2.0 L

[REDACTED] 2,520 Automatic  
 Weight, 5-speed 100  
 Manual 2,620

[REDACTED]  
 Weight, unspecified 2,800  
 Transmission

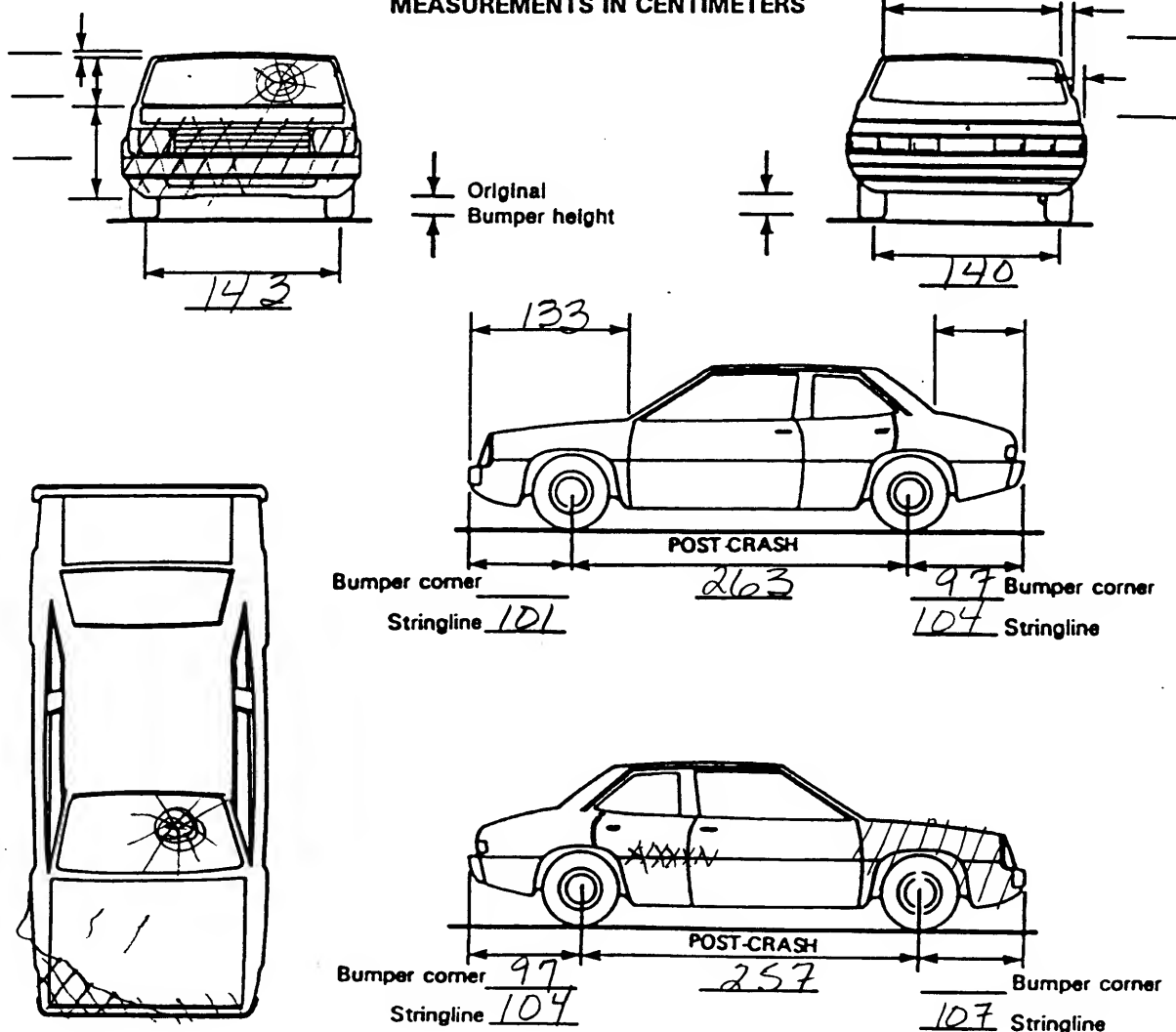
## SPECIAL CRASH INVESTIGATION ADDENDUM

Submodel Designation: {specify}		Color: {specify} <u>Gray</u>	Repair Cost: \$
Transmission: {circle} <u>Automatic</u>   Manual		Speed: 3-speed   4-speed   <u>5-speed</u>   Other:	
Steering: {circle} Power-assisted   Manual		Type: rack-and-pinion   worm-and-gear   Other	
{please describe}:			
Brakes: {circle} Power-assisted   Manual		Type: 4-wheel disc   4-wheel drum   4-wheel hydraulic   front disc, rear drum   Other:	
Observed Defects: {specify}			
Fleet Type: {circle} Private vehicle   Rental vehicle   Leased vehicle   Commercial vehicle   Other			
{please describe}:			

## VEHICLE DAMAGE SKETCH

<b>TIRE—WHEEL DAMAGE</b> a. Rotation physically restricted RF <u>1</u> LF <u>2</u> RR <u>2</u> LR <u>2</u> (1) Yes (2) No (8) NA (9) Unk.		<b>ORIGINAL SPECIFICATIONS</b> Wheelbase <u>263</u> cm Overall Length <u>466</u> cm Maximum Width <u>173</u> cm Curb Weight <u>1,270</u> kg Average Track <u>141</u> cm Front Overhang <u>99</u> cm Rear Overhang <u>104</u> cm Undeformed End Width <u>136</u> cm Engine Size: cyl./displ. <u>V4 2</u> L		<b>WHEEL STEER ANGLES</b> (For locked front wheels or displaced rear axles only) RF ± _____ ° LF ± _____ ° RR ± _____ ° LR ± _____ ° Within ± 5 degrees
<b>TYPE OF TRANSMISSION</b> <input type="checkbox"/> Manual <input checked="" type="checkbox"/> Automatic <b>END SHIFT ≥ 10 CM</b> <input type="checkbox"/> Yes <input type="checkbox"/> No		<b>DRIVE WHEELS</b> <input checked="" type="checkbox"/> FWD <input type="checkbox"/> RWD <input type="checkbox"/> 4WD <b>Approximate Cargo Weight</b> _____ kg		

## MEASUREMENTS IN CENTIMETERS



NOTES: Sketch new perimeter and cross hatch direct damage and single hatch induced damage on all views. Annotate observations which might be useful in reconstructing the accident (e.g., grass in tire bead, direction of striations, scuff on sidewalls, etc.). If pulling trailer, sketch type of trailer and damage received on the back of this page.

Annotate any damage caused by extrication such as component removal by torching, prying, or hydraulic shears.

**CHEVROLET Division.**

Type of Body Pass. Cap.	Model	O'r-all Length	Ship. Wt.	Ca. Ft. Vol.	Factory List Pr.	Del'd Pr.
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**1988**

**CHEVROLET CAMARO, Rear Wheel Drive; 101.0" W.B.; V-6, 2.8 L. (173) MFI Gas Eng. (LB8)**  
Bore & Stroke 3.50"x2.99"; Tax. H.P. 29.4; P.D. 173 cu. in., 2.8 Liter

4-Ps. 2-dr. Sport Cpe., 5-Sp. Man. 1FP87	192.0"	2,975	407.0	\$10,995.00	\$10,995.00
4-Ps. 2-dr. Sp. Cp., 5-Sp. M. 1FP87/Z28	192.0"	3,149	407.0	13,490.00	13,490.00
4-Ps. 2-dr. Con. Cp., 5-Sp. M. 1FP87/Z28	192.0"	3,270	407.0	16,255.00	16,255.00
4-Ps. 2-dr. Conv. Cpe., 5-Sp. M. Z28/Z08	192.0"	3,272	407.0	18,015.00	18,015.00

Optional Equip.: Engines: V-8, 5.0 L. (305) Gas (LB9), \$400; V-8, 5.0 L. (305) Gas (L03), \$745; -8, 5.7 L. (350) Gas (L98), \$1045; Transmissions: Auto. w/O.D. (MX0), \$490; Power Seat, 6-way, in pkg. only; Power Door Locks, all models; Power Windows, \$210; Roof Hatch, Std.; Defogger, R/Window, all models; Air Conditioning, \$775; Power Brakes, Std.; Cruise Control, all models except LB8; Tilt Wheel, all models; Radio, AM/FM w/Tape Deck, Opt.

**CHEVROLET MONTE CARLO, RWD, Gas Eng., V-6, 4.3 L. (282) (LB4), EFI**  
Bore & Stroke 4.00"x3.48"; Tax. H.P., 38.4; P.D. 262 cu. in., 4.3 Liter

**MONTE CARLO—108" W.B.; Rear Wheel Drive; Chevy Auto. Trans.**

6-Ps. 2-dr. LS Spt. Cpe., Aut. Tr. 1GZ37	200.4"	3,118	453.0	\$12,330.00	\$12,330.00
6-Ps. 2-dr. SS Cpe., Aut. Tr. 1GZ37/Z65	202.4"	3,286	462.0	14,320.00	14,320.00

Optional Equip.: Engines: V-8, 5.0 L. (305) 4ME (LB4) \$440; SS-V-8, 5.0 L. (305) 4ME (L69) \$ NA; Manual Control, \$ NA; Air Conditioning, \$775; 6-Way Power Seat, \$240; Power Door Locks, \$ NA; Power Windows, \$210; Glass Roof, \$ NA; Speed Control, \$ NA; Defogger, \$ NA.

**CHEVROLET CAPRICE—Rear Wheel Drive, 116.0" W.B.; Gas Eng., V-6, 4.3 L. (262) EFI (LB4)**  
Bore & Stroke 4.00"x3.48"; Tax. H.P. 38.4; P.D. 262 cu. in., 4.3 Liter

**CAPRICE—116.0" w.b., RWD, Auto. Trans.**

6-Ps. 4-dr. Sedan 1BL69	212.2"	3,406	522.0	\$12,030.00	\$12,030.00
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**CAPRICE CLASSIC—116.0" w.b., RWD, Auto. Trans.**

6-Ps. 4-dr. Sedan 1BN69	212.8"	3,355	524.0	\$12,575.00	\$12,575.00
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**CLASSIC STATION WAGON—116.0" w.b., RWD, Auto. Trans., V-8 5.0 L. (307) 4-bbl. (LV2)**

8-Ps. 4-dr. Station Wagon, 3-st. 1BN35	215.7"	4,041	576.0	\$14,340.00	\$14,340.00
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**CAPRICE CLASSIC BROUGHAM—116.0" w.b., RWD, Auto. Trans., V-6 4.3 L. (262) EFI Gas**

6-Ps. 4-dr. Sedan 1BU69	212.8"	3,470	524.0	\$13,645.00	\$13,645.00
6-Ps. 4-dr. LS Sedan 1BU69/B6N	212.8"	3,478	524.0	14,820.00	14,820.00

Optional Equip.: Engines: 5.0 L. V-8 (305) 4-bbl. Gas (42 lbs.), \$440; 5.0 L. V-8 (307) 4-bbl., \$ NA; 5.7 L. V-8 (350) 4-bbl. (72.6 lbs.), \$ NA; Transmission: 4-Spd. Auto. (3 lbs.), Std.; Power Front Seat (5), \$240; Power Door Lock, \$ NA; Power Window, \$285; Power Tailgate, \$ NA; Defogger, \$ NA; Air Conditioning, \$775 (Std. on Station Wagon); Tilt Wheel, \$ NA; Radio: AM/FM Stereo, \$ NA; w/Tape Deck, \$ NA; Roof Carrier, \$ NA

**CORVETTE SERIES Gas Eng., 5.7 L. V-8 (350) (198) TPI; Sept., 1987**  
Bore & Stroke 4.00"x3.48"; Tax. H.P. 51.2; P.D. 350 cu. in., 5.7 L.

**Corvette—96.2" w.b., 4-Spd. Man. Trans.**

2-Ps. 2-dr. Hatchback Coupe 1YY07	176.5"	3,125	339.0	\$29,480.00	\$29,480.00
2-Ps. 2-Dr. Convertible Coupe 1YY67	176.5"	3,199	339.0	34,820.00	34,820.00

1988 Corvette Optional Equip.: Transmission: 4-spd. Auto. w/O.D., \$ Std.; Air Conditioning, \$ Std.; Delco/Boss Radio: w/Tape Deck, \$ NA; Defogger System, \$ NA; Power Seat, \$240.

**CHEVROLET CORSAICA SERIES, Front Wheel Drive; Gas Eng. 2.0 L. L-4 Cyl. (121) EFI (LL8), 5-Spd. Man. Trans., Sept., 1987**  
Bore & Stroke 3.50"x3.15"; Tax. H.P. 19.6; P.D. 121 cu. in., 2.0 Liter, W.B. 103.4"

5-Ps. 4-dr. Notchback Sedan 1TL69	183.4"	2,520	407.0	\$9,555.00	\$9,555.00
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Optional Equip.: Engine: 2.8 L. 6-Cyl. (173) MFI (LB6); H.P. 29.4, \$660; Auto. Trans. (MX1), \$490; Power Door Locks, \$ NA; Power Windows, \$285 for 4-dr. Sdn., \$210 for 2-dr. Coupe; Air Conditioning, \$750; Elect. Speed Control, \$ NA; Tilt Wheel, \$ NA; Radio: AM/FM, \$ NA; w/Tape Deck, \$ NA; Luggage Rack, \$ NA.

**CHEVROLET BERETTA SERIES: Front Wheel Drive; Gas Eng.: 2.0 L. L-4 Cyl. (121) EFI (LL8), 5-spd. Man. Trans., Sept., 1987**  
Bore & Stroke 3.50"x3.15"; Tax. H.P. 19.6; P.D. 121 cu. in., 2.0 Liter, 103.4" w.b.

**CHEVROLET BERETTA**

5-Ps. 2-dr. Notchback Coupe 1LV37	187.2"	2,540	409.0	\$10,135.00	\$10,135.00
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Optional Equip.: Engine: 2.8 L. V-6 Gas (173) MFI (LB6) 29.4 H.P., \$660; Auto. Trans.: (MD9), \$490; Air Conditioning, \$750; Power Door Locks, \$ NA; Power Windows, \$210; Tilt Wheel, \$ NA; Radio: AM/FM, \$ NA; w/Tape Deck, \$ NA; Power Disc Brakes, \$ Std.; Power Steering, \$ Std.

**1989**

(Aug. 12, 1988)

**SPECTRUM Series, 94.5" w.b., 1.5 L. (98) 2-bbl. Gas Eng., 5-Spd. Manual Trans.**  
Bore & Stroke 3.83"x3.11"; Tax. H.P. 14.89; P.D. 98 cu. in., 1.5 L.

**SPECTRUM—Front Wheel Drive, 94.5" w.b.**

4-Ps. 4-dr. Notchback Sedan 1RG69	160.2"	1,922	301.0	\$7,795.00	\$8,110.00
2-Ps. 2-dr. Hatchback Coupe 1RF77	160.2"	1,896	301.0	7,295.00	7,610.00

SPECTRUM Options: Air Conditioning, \$660.

**CAMALIER—Front Wheel Drive, 101.2" w.b., 2.0 L., L4 Cyl. (121) EFI Gas Eng. (LL8) 5-Spd. Manual Trans.**  
Bore & Stroke 3.50"x3.15"; Tax. H.P. 19.6; P.D. 121 cu. in., 2.0 L.

5-Ps. 2-dr. VL Coupe (WV9) 1JC37	174.5"	2,321	347.0	\$7,395.00	\$7,820.00
5-Ps. 2-dr. Coupe 1JC37	174.5"	2,327	347.0	8,395.00	8,820.00
5-Ps. 4-dr. Station Wagon 1JC35	177.9"	2,399	368.0	8,975.00	9,400.00
5-Ps. 4-dr. Sedan 1JC69	174.5"	2,342	357.0	8,595.00	9,020.00

CAMALIER Options: 2.8 L. V6, MFI Gas Eng., \$660.

## CODES FOR OBJECT CONTACTED

(57) Fence

(58) Wall

- (59) Building**

- (60) Ditch or culvert

- (61) Ground

- (62) Fire hydrant**

- (63) Curb**

- (64) Bridge**

- (68) Other fixed object (specify):

- (36) Noncollision injury**

- (38) Other noncollision (specify):

- (69) Unknown fixed object

- (39) Noncollision – details unknown**

### Collision with Nonfixed Object

(70) Passenger car, light truck, van, or other vehicle not in-transport

- (41) Tree ( $\leq 10$  cm in diameter)**

- (71) Medium/heavy truck or bus not in-transport**

- (42) Tree (> 10 cm in diameter)

- (72) **Pedestrian**

- (43) Shrubbery or bush**

- (73) Cyclist or cycle

- (44) Embankment

- (74) Other nonmotorist or conveyance

- (45) Breakaway pole or post (any diameter)**

- (75) Vehicle occupant

- (76) Animal

(77) Train

- (50) Pole or post ( $\leq 10$  cm in diameter)**

- (78) Trailer, disconnected in transport

- (51) Pole or post (> 10 cm but ≤ 30 cm in diameter)

- (79) Object fell from vehicle in-transport

- (52) Pole or post (> 30 cm in diameter)

- (88) Other nonfixed object (specify):

- (53) Pole or post (diameter unknown)

- (89) Unknown nonfixed object

- (54) Concrete traffic barrier**

- (98) Other event (specify):

- (55) Impact attenuator**

- (99) Unknown event or object

- (56) Other traffic barrier (includes guardrail)  
(specify):

- (99) Unknown event or object

[illegible]



## COLLISION DEFORMATION CLASSIFICATION

## HIGHEST DELTA "V"

Accident Event Sequence Number	Object Contacted	(1) (2) Direction of Force	(3) Deformation Location	(4) Longitudinal or Lateral Location	(5) Vertical or Lateral Location	(6) Type of Damage Distribution	(7) Deformation Extent
4. <u>01</u>	5. <u>01</u>	6. <u>12</u>	7. <u>F</u>	8. <u>Z</u>	9. <u>E</u>	10. <u>W</u>	11. <u>02</u>

## Second Highest Delta "V"

12. _____	13. _____	14. _____	15. _____	16. _____	17. _____	18. _____	19. _____
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## CRUSH PROFILE IN CENTIMETERS

The crush profile for the damage described in the CDC(s) above should be documented in the appropriate space below. (ALL MEASUREMENTS ARE IN CENTIMETERS.)

## HIGHEST DELTA "V"

20. <u>L</u>	21. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	22. <u>±D</u>
<u>136</u>	<u>000</u>	<u>002</u>	<u>011</u>	<u>015</u>	<u>024</u>	<u>036</u>	<u>⊕ 042</u>

## Second Highest Delta "V"

23. <u>L</u>	24. <u>C<sub>1</sub></u>	<u>C<sub>2</sub></u>	<u>C<sub>3</sub></u>	<u>C<sub>4</sub></u>	<u>C<sub>5</sub></u>	<u>C<sub>6</sub></u>	25. <u>±D</u>
_____	_____	_____	_____	_____	_____	_____	_____

## 26. Undeformed End Width

(Coded when highest severity impact is an end plane impact.)

\_\_\_\_\_ Code to the nearest centimeter

(250) 250 centimeters or more

(998) No highest severity end plane impact

(999) Unknown

136

## 27. Direct Damage Width

(For highest severity impact)

\_\_\_\_\_ Code to the nearest centimeter

(250) 250 centimeters or more

(999) Unknown

051

## 28. Original Wheelbase

\_\_\_\_\_ Code to the nearest centimeter

(650) 650 centimeters or more

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

263

## 29. Original Average Track Width

\_\_\_\_\_ Code to the nearest centimeter

(185) 185 centimeters or more

(999) Unknown

\_\_\_\_\_ inches X 2.54 = \_\_\_\_\_ centimeters

141

**FUEL SYSTEM**

30. Are CDCs Documented  
but Not Coded on The  
Automated File?

- (0) No  
(1) Yes

31. Researcher's Assessment of Vehicle  
Disposition

- (0) Not towed due to vehicle damage  
(1) Towed due to vehicle damage  
(9) Unknown

32. Is This A Multi-Stage Manufactured Vehicle  
And/Or A Certified Altered Vehicle?

- (0) No post manufacturer modifications  
(1) Yes - post manufacturer modifications  
(specify): \_\_\_\_\_

(Include photograph of CERTIFICATION  
PLACARD in case report)

- (9) Unknown if vehicle is modified

35. Location of Fuel Tank-1 Filler Cap

36. Location of Fuel Tank-2 Filler Cap

- (0) No fuel tank  
(1) On back plane  
(2) Aft of center of the rear wheels (rear axle)  
on left side plane  
(3) Aft of center of the rear wheels (rear axle)  
on right side plane  
(4) Forward of center of the rear wheels (rear  
axle) on left side plane  
(5) Forward of center of the rear wheels (rear  
axle) on right side plane  
(6) Over the center of the rear wheels (rear  
axle) on left side plane  
(7) Over the center of the rear wheels (rear  
axle) on right side plane  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

37. Type of Fuel Tank-1

38. Type of Fuel Tank-2

- (0) No fuel tank (electrical vehicle)  
(1) Metallic  
(2) Non-metallic  
(9) Unknown

39. Location of Fuel Tank-1

40. Location of Fuel Tank-2

- (0) No fuel tank  
(1) Aft of center of the rear wheels (rear axle)  
centered  
(2) Aft of center of the rear wheels (rear axle)  
left side  
(3) Aft of center of the rear wheels (rear axle)  
right side  
(4) Forward of center of the rear wheels (rear  
axle) centered  
(5) Forward of center of the rear wheels (rear  
axle) left side  
(6) Forward of center of the rear wheels (rear  
axle) right side  
(7) Over center of the rear wheels (rear axle)  
(8) Other (specify): \_\_\_\_\_  
(9) Unknown

41. Damage to Fuel Tank-1

42. Damage to Fuel Tank-2

- (0) No fuel tank  
(1) No damage to fuel tank  
(2) Deformed, no seam failure  
(3) Deformed, with a seam failure  
(4) Punctured  
(5) Lacerated (ripped)  
(6) Abraded (scraped)  
(7) Filler neck separation from the fuel tank  
(8) Other damage (specify): \_\_\_\_\_  
(9) Unknown

**FIRE OCCURRENCE**

33. Fire Occurrence

- (0) No fire

Yes, fire occurred

- (1) Minor  
(2) Major  
(9) Unknown

34. Origin of Fire

- (0) No fire  
(1) Vehicle exterior (front, side, back, top)  
(2) Exhaust system  
(3) Fuel tank (and other fuel retention  
system parts)  
(4) Engine compartment  
(5) Cargo/trunk compartment  
(6) Instrument panel  
(7) Passenger compartment area  
(8) Other location (specify): \_\_\_\_\_

- (9) Unknown

43. Leakage Location of Fuel System-1 144. Leakage Location of Fuel System-2 0

(0) No fuel tank

(1) No fuel leakage

*Primary Area Of Leakage*

(2) Tank

(3) Filler neck

(4) Cap

(5) Lines/pump/filter

(6) Vent/emission recovery

(8) Other (specify): \_\_\_\_\_

(9) Unknown

45. Fuel Type-1 0146. Fuel Type-2 00*Single Fuel Type*

(00) No fuel tank

(01) Gasoline

(02) Diesel

(03) CNG (Compressed Natural Gas)

(04) LPG (Liquid Petroleum Gas) also known as Propane

(05) LNG (Liquid Natural Gas)

(06) Methanol (M100 or M85)

(07) Ethanol (E100 or E85)

(08) Other (Hydrogen or others) (specify): \_\_\_\_\_

*Electric Powered or Electric/Solar Powered Vehicles*

(10) Lead Acid Battery

(11) Nickel-Iron Battery

(12) Nickel-Cadmium Battery

(13) Sodium Metal Chloride Battery

(14) Sodium Sulfur Battery

(18) Other (Specify): \_\_\_\_\_

(98) Other Hybrid (specify): \_\_\_\_\_

(99) Unknown fuel type

47. Is This Vehicle Equipped With More Than Two Fuel Tanks? 0

(0) No (one or two tanks only)

*Yes - More Than Two Tanks*(1) Yes -- no damage to any tank or filler cap and no fuel system leakage(2) Yes -- no damage to any tank or filler cap but there is fuel system leakage (specify leakage location): \_\_\_\_\_(3) Yes -- damage to an additional tank or filler cap and there is fuel system leakage (specify the following):

Type of tank \_\_\_\_\_

Tank location \_\_\_\_\_

Filler cap location \_\_\_\_\_

Tank damage \_\_\_\_\_

Location of leakage \_\_\_\_\_

Type of fuel \_\_\_\_\_

(9) Unknown if more than two tanks

**COMMENTS**

\*\*\* STOP: IF THE CDS APPLICABLE VEHICLE WAS NOT TOWED \*\*\*

(GV10=0)

DO NOT COMPLETE THE INTERIOR VEHICLE FORM.

## INTERIOR VEHICLE FORM

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10  
2. Case Number - Stratum 9618  
3. Vehicle Number 02

## INTEGRITY

4. Passenger Compartment Integrity 00  
(00) No integrity loss

Yes, Integrity Was Lost Through

- (01) Windshield
- (02) Door (side)
- (03) Door/hatch (back door)
- (04) Roof
- (05) Roof glass
- (06) Side window
- (07) Rear window (backlight)
- (08) Roof and roof glass
- (09) Windshield and door (side)
- (10) Windshield and roof
- (11) Side and rear window (side window and backlight)
- (12) Windshield and side window
- (13) Door and side window
- (98) Other combination of above (specify):

(99) Unknown

## Door, Tailgate or Hatch Opening

5. LF 1 6. RF 1 7. LR 1 8. RR 1 9. TG/H 0

- (0) No door/gate/hatch
- (1) Door/gate/hatch remained closed and operational
- (2) Door/gate/hatch came open during collision
- (3) Door/gate/hatch jammed shut
- (8) Other (specify):

(9) Unknown

## Damage/Failure Associated with Door, Tailgate or Hatch Opening in Collision. If IV05-IV09 = 2, Then code Ø

10. LF 0 11. RF 0 12. LR 0 13. RR 0 14. TG/H 0

- (0) No door/gate/hatch or door not opened

## Door, Tailgate or Hatch Came Open During Collision

- (1) Door operational (no damage)
- (2) Latch/striker failure due to damage
- (3) Hinge failure due to damage
- (4) Door structure failure due to damage
- (5) Door support (i.e., pillar, sill, roof side rail, etc.) failure due to damage
- (6) Latch/striker and hinge failure due to damage
- (8) Other failure (specify):

(9) Unknown

## GLAZING

## Type of Window/Windshield Glazing

15. WS 1 16. LF 2 17. RF 2 18. LR 2 19. RR 2  
20. BL 2 21. Roof 0 22. Other 0

- (0) No glazing
- (1) AS-1 - Laminated
- (2) AS-2 - Tempered
- (3) AS-3 - Tempered-tinted (original)
- (4) AS-2 - Tempered-with after market tint
- (5) AS-3 - Tempered-tinted (with additional after market tint)
- (6) AS-14 - Glass/Plastic
- (7) Glazing removed prior to accident
- (8) Other (specify):

(9) Unknown

## Window Precrash Glazing Status

23. WS 1 24. LF 2 25. RF 2 26. LR 2 27. RR 2  
28. BL 1 29. Roof 0 30. Other 0

- (0) No glazing
- (1) Fixed
- (2) Closed
- (3) Partially opened
- (4) Fully opened
- (7) Glazing removed prior to accident
- (9) Unknown

## Glazing Damage from Impact Forces

31. WS 1 32. LF 1 33. RF 1 34. LR 1 35. RR 1  
36. BL 1 37. Roof 0 38. Other 0

- (0) No glazing
- (1) No glazing damage from impact forces
- (2) Glazing in place and cracked from impact forces
- (3) Glazing in place and holed from impact forces
- (4) Glazing out-of-place (cracked or not) and not holed from impact forces
- (5) Glazing out-of-place and holed from impact forces
- (6) Glazing disintegrated from impact forces
- (7) Glazing removed prior to accident
- (9) Unknown if damaged

## Glazing Damage from Occupant Contact

39. WS 3 40. LF 1 41. RF 1 42. LR 1 43. RR 1  
44. BL 1 45. Roof 0 46. Other 0

- (0) No glazing
- (1) No occupant contact to glazing
- (2) Glazing contacted by occupant but no glazing damage
- (3) Glazing in place and cracked by occupant contact
- (4) Glazing in place and holed by occupant contact
- (5) Glazing out-of-place (cracked or not) by occupant contact and not holed by occupant contact
- (6) Glazing out-of-place by occupant contact and holed by occupant contact
- (7) Glazing removed prior to accident
- (8) Glazing disintegrated by occupant contact
- (9) Unknown if contacted by occupant



## STEERING RIM/SPOKE DEFORMATION

(All Measurements Are in Centimeters)

COMPARISON VALUE

-

DAMAGE VALUE

=

DEFORMATION

-

=

-

No DEFORMATION

-

=

-

=

## OCCUPANT AREA INTRUSION

Note: If no intrusions, leave variables IV47-IV86 blank.

	Location of Intrusion	Intruding Component	Magnitude of Intrusion	Dominant Crush Direction
1st	47. _____	48. _____	49. _____	50. _____
2nd	51. _____	52. _____	53. _____	54. _____
3rd	55. _____	56. _____	57. _____	58. _____
4th	59. _____	60. _____	61. _____	62. _____
5th	63. _____	64. _____	65. _____	66. _____
6th	67. _____	68. _____	69. _____	70. _____
7th	71. _____	72. _____	73. _____	74. _____
8th	75. _____	76. _____	77. _____	78. _____
9th	79. _____	80. _____	81. _____	82. _____
10th	83. _____	84. _____	85. _____	86. _____

## LOCATION OF INTRUSION

Front Seat  
 (11) Left  
 (12) Middle  
 (13) Right

Second Seat  
 (21) Left  
 (22) Middle  
 (23) Right

Third Seat  
 (31) Left  
 (32) Middle  
 (33) Right

Fourth Seat  
 (41) Left  
 (42) Middle  
 (43) Right

(97) Catastrophic  
 (98) Other enclosed area (specify) \_\_\_\_\_

(99) Unknown

## INTRUDING COMPONENT

*Interior Components*

- (01) Steering assembly
- (02) Instrument panel left
- (03) Instrument panel center
- (04) Instrument panel right
- (05) Toe pan
- (06) A (A1/A2)-pillar
- (07) B-pillar
- (08) C-pillar
- (09) D-pillar
- (10) Side panel - forward of the A1/A2-pillar
- (11) Door panel (side)
- (12) Side panel - rear of the B-pillar
- (13) Roof (or convertible top)
- (14) Roof side rail
- (15) Windshield
- (16) Windshield header
- (17) Window frame
- (18) Floor pan (includes sill)
- (19) Backlight header
- (20) Front seat back
- (21) Second seat back
- (22) Third seat back
- (23) Fourth seat back
- (24) Fifth seat back
- (25) Seat cushion
- (26) Back door/panel (e.g., tailgate)
- (27) Other interior component (specify): \_\_\_\_\_

*Exterior Components*

- (30) Hood
- (31) Outside surface of this vehicle (specify): \_\_\_\_\_
- (32) Other exterior object in the environment (specify): \_\_\_\_\_
- (33) Unknown exterior object
- (97) Catastrophic
- (98) Intrusion of unlisted component(s) (specify): \_\_\_\_\_
- (99) Unknown

## MAGNITUDE OF INTRUSION

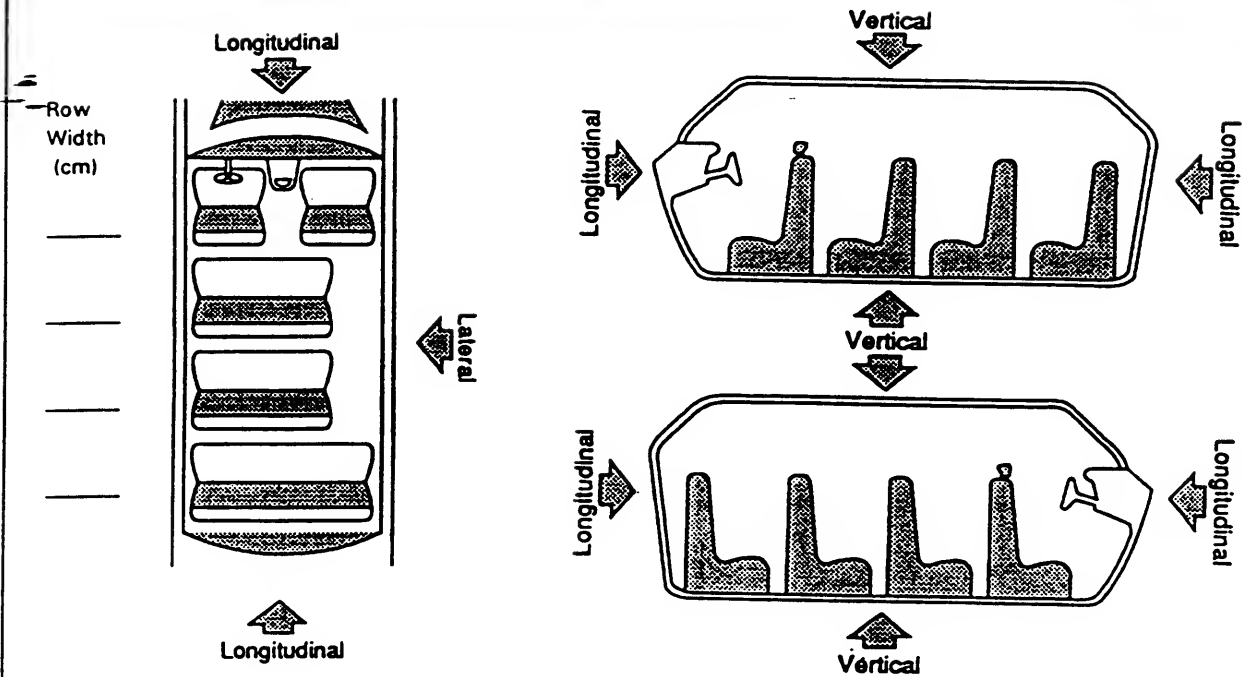
- (1) ≥ 3 centimeters but < 8 centimeters
- (2) ≥ 8 centimeters but < 15 centimeters
- (3) ≥ 15 centimeters but < 30 centimeters
- (4) ≥ 30 centimeters but < 46 centimeters
- (5) ≥ 46 centimeters but < 61 centimeters
- (6) ≥ 61 centimeters
- (7) Catastrophic
- (9) Unknown

## DOMINANT CRUSH DIRECTION

- (1) Vertical
- (2) Longitudinal
- (3) Lateral
- (7) Catastrophic
- (9) Unknown

# INTRUSION WORKSHEET

**NOTE: SKETCH INTRUDED AREAS**



LOCATION OF INTRUSION	INTRUDED COMPONENT	(All Measurements Are In Centimeters)			DOMINANT CRUSH DIRECTION
		COMPARISON VALUE	INTRUDED VALUE	=	
		-		=	
		No INTRUSIONS			
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	
		-		=	

Document no more than the 15 most severe intrusions

**STEERING COLUMN****INSTRUMENT PANEL**

## 87. Steering Column Type

- (1) Fixed column  
 (2) Tilt column  
 (3) Telescoping column  
 (4) Tilt and telescoping column  
 (8) Other column type (specify): \_\_\_\_\_  
 (9) Unknown

## 88. Tilt Steering Column Adjustment

- (0) No tilt steering column  
 (1) Full up  
 (2) Between full up and center  
 (3) Center  
 (4) Between center and full down  
 (5) Full down  
 (9) Unknown

## 89. Telescoping Steering Column Adjustment

- (0) No telescoping steering column  
 (1) Full back  
 (2) Between full back and midpoint  
 (3) Midpoint  
 (4) Between midpoint and full forward  
 (5) Full forward  
 (9) Unknown

## 90. Steering Rim/Spoke Deformation

- Code actual measured  
 deformation to the nearest centimeter  
 (00) No steering rim deformation  
 (01-14) Actual measured value in centimeters  
 (15) 15 centimeters or more  
 (98) Observed deformation cannot be measured  
 (99) Unknown

## 91. Location of Steering Rim/Spoke Deformation

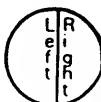
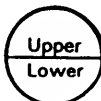
- (00) No steering rim deformation

*Quarter Sections*

- (01) Section A  
 (02) Section B  
 (03) Section C  
 (04) Section D

*Half Sections*

- (05) Upper half of rim/spoke  
 (06) Lower half of rim/spoke  
 (07) Left half of rim/spoke  
 (08) Right half of rim/spoke



- (09) Complete steering wheel collapse  
 (10) Undetermined location  
 (99) Unknown

## 92. Odometer Reading

\_\_\_\_\_ kilometers  
 Code to the nearest 1,000 kilometers  
 (000) No odometer  
 (001) Less than 1,500 kilometers  
 (500) 499,500 kilometers or more  
 (999) Unknown  
144,121 miles X 1.6093 = 231,940 kilometers

Source: ODOM

## 93. Instrument Panel Damage from Occupant Contact?

- (0) No  
 (1) Yes  
 (9) Unknown

## 94. Type of Knee Bolster Covering

- (0) No knee bolster  
 (1) Padded  
 (2) Rigid plastic  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## 95. Knee Bolsters Deformed from Occupant Contact?

- (0) No knee bolster  
 (1) No deformation  
 (2) Yes - deformation  
 (9) Unknown

## 96. Did Glove Compartment Door Open During Collision(s)?

- (0) No glove compartment door  
 (1) No - door did not open  
 (2) Yes - door opened  
 (9) Unknown

*opened,  
not due  
to impact*

## 97. Adaptive (Assistive) Driving Equipment

- (0) No adaptive driving equipment  
 (1) Adaptive driving equipment installed  
 (Check all that apply.)  
 [ ] Hand controls for braking/acceleration  
 [ ] Steering control devices (attached to OEM steering wheel)  
 [ ] Steering knob attached to steering wheel  
 [ ] Low effort power steering (unit or device)  
 [ ] Replacement steering wheel (i.e., reduced diameter)  
 [ ] Joy-stick steering controls  
 [ ] Wheelchair tie-downs  
 [ ] Modification to seat belts (specify): \_\_\_\_\_  
 [ ] Additional or relocated switches (specify): \_\_\_\_\_  
 [ ] Raised roof  
 [ ] Wall-mounted head rest (used behind wheelchair)  
 [ ] Other adaptive device (specify): \_\_\_\_\_

(9) Unknown



# FIRST SEAT FRONTAL AIR BAGS

**NOTES:** Encode the applicable data *for the driver and first seat passenger* in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

	Driver	Passenger
A-Type of air bag?	0	0
B-Flaps open at tear points?	0	0
C-Flaps damaged?	0	0
D-Air bag damaged?	00	00
E-Source of air bag damage	00	00
F-Air bag tethered?	0	0
G-Air bag have vent ports?	0	0
H-Other occupant contact air bag?	0	0
I-Occupant wearing eyewear?	0	0

## A-Type of Air Bag

- (0) Not equipped/not available
- (1) Original manufacturer installed system
- (2) Retrofitted air bag
- (3) Replacement air bag
- (8) Unknown type of air bag
- (9) Unknown

## B-Did Air Bag Module Cover Flap(s) Open At Designated Tear Points?

- (0) Not equipped/not available
- (1) No
- (2) Yes
- (3) Deployed, unknown if flap(s) opened at designated tear points
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## C-Were Air Bag Module Cover Flap(s) Damaged?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if air bag module cover flap(s) damaged
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## D-Was There Damage To The Air Bag?

- (00) Not equipped/not available
- (01) Not damaged

### Yes - Air Bag Damage

- (02) Ruptured
- (03) Cut
- (04) Torn
- (05) Holed
- (06) Burned
- (07) Abraded
- (88) Other damage (specify):

- (95) Damaged, details unknown
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## E-Source of Air Bag Damage

- (00) Not equipped/not available
- (01) Not damaged
- (02) Object worn by occupant, (specify):
- (03) Object carried by occupant, (specify):
- (04) Adaptive/assistive controls, (specify):
- (05) Fire in vehicle
- (06) Thermal burns
- (07) Rescue or emergency efforts
- (88) Other damage source (specify):

- (95) Damaged, unknown source
- (96) Deployed, unknown if damaged
- (97) Not deployed
- (98) Unknown if deployed
- (99) Unknown

## F-Was The Air Bag Tethered?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of tether straps):
- (3) Deployed, unknown if tethered
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## G-Did The Air Bag Have Vent Ports?

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify number of vent ports):
- (3) Deployed, unknown if vent ports present
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## H-Was the Air Bag in this Occupant's Position Contacted by Another Occupant?

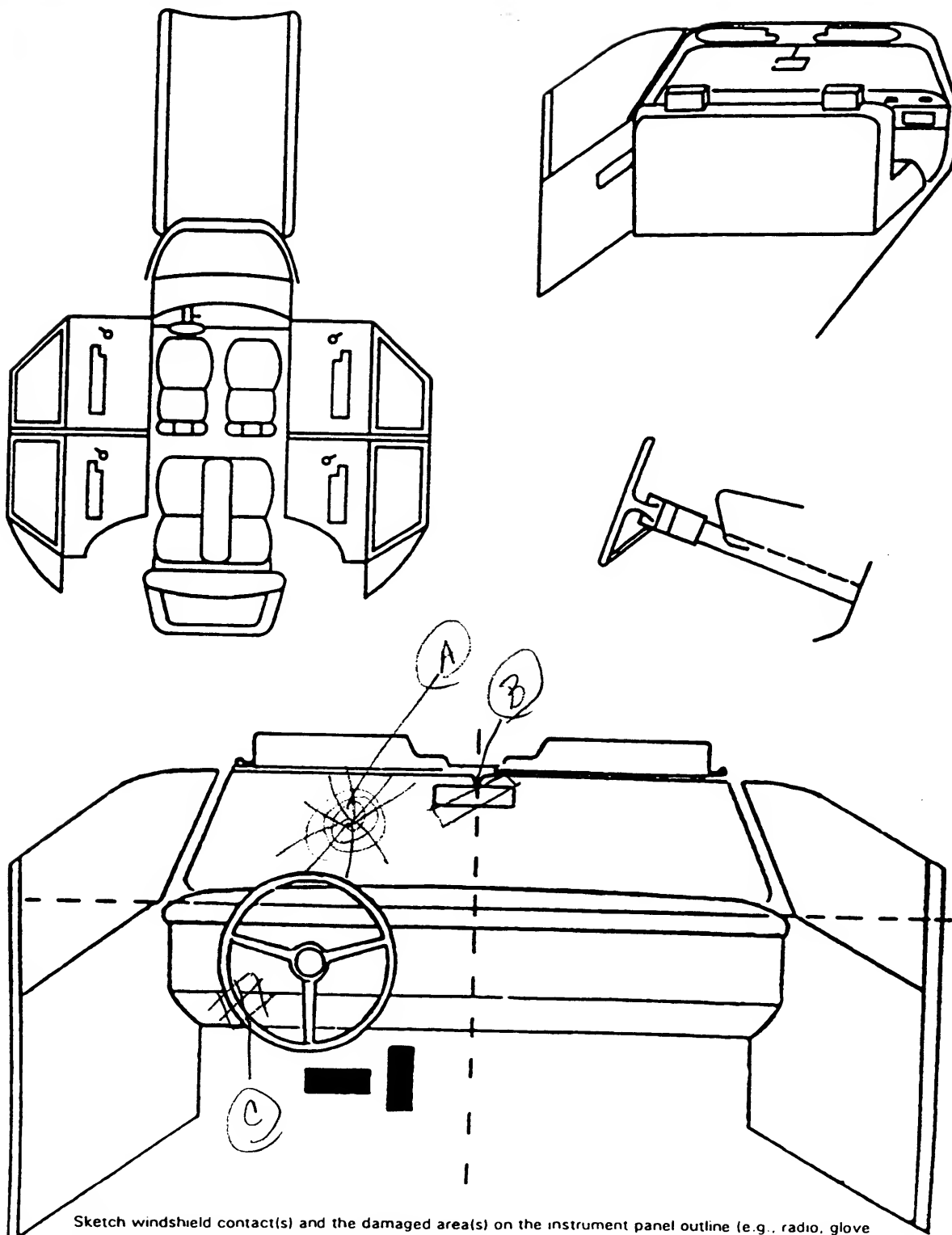
- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):
- (3) Deployed, unknown if other occupant contact to air bag
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

## I-Was This Occupant Wearing Eye-wear?

- (0) Not equipped/not available
- (1) No
- (2) Eyeglasses/sunglasses
- (3) Contact lenses
- (4) Deployed, unknown if eyewear worn
- (7) Not deployed
- (8) Unknown if deployed
- (9) Unknown

**VEHICLE INTERIOR SKETCHES**

Note area of ejection/entrapment



Sketch windshield contact(s) and the damaged area(s) on the instrument panel outline (e.g., radio, glove compartment, damage to instrument panel structure).

Cross hatch contact points, draw spider webs or use other annotation as may be appropriate.

Annotate the contacted area with a letter (begin with A) and list on the Points of Occupant Contact page.

## POINTS OF OCCUPANT CONTACT

Contact	Interior Component Contacted	Occupant No. If Known	Body Region If Known	Supporting Physical Evidence	Confidence Level of Contact Point
A	001	1	HEAD	SPIDER WEB	1
B	002	1	HEAD	tilted	3
C	010	1	(L) Knee	PLASTIC CRACKED/scuff	1
D					
E					
F					
G					
H					
I					
J					
K					
L					
M					
N					

## CODES FOR INTERIOR COMPONENTS

## FRONT

- (001) Windshield  
 (002) Mirror  
 (003) Sunvisor  
 (004) Steering wheel rim  
 (005) Steering wheel hub/spoke  
 (006) Steering wheel (combination of codes 004 and 005)  
 (007) Steering column, transmission selector lever, other attachment  
 (008) Cellular telephone or CB radio  
 (009) Add on equipment (e.g., tape deck, air conditioner)  
 (010) Left instrument panel and below  
 (011) Center instrument panel and below  
 (012) Right instrument panel and below  
 (013) Glove compartment door  
 (014) Knee bolster  
 (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)  
 (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)  
 (017) Windshield reinforced by exterior object. (specify):  
 (019) Other front object (specify):

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests  
 (052) Left side hardware or armrest  
 (053) Left A (A1/A2)-pillar  
 (054) Left B-pillar  
 (055) Other left pillar (specify):  
 (056) Left side window glass  
 (057) Left side window frame  
 (058) Left side window sill  
 (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (060) Other left side object (specify):

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests  
 (102) Right side hardware or armrest  
 (103) Right A (A1/A2)-pillar  
 (104) Right B-pillar  
 (105) Other right pillar (specify):  
 (106) Right side window glass  
 (107) Right side window frame  
 (108) Right side window sill  
 (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.  
 (110) Other right side object (specify):

## INTERIOR

- (151) Seat, back support  
 (152) Belt restraint webbing/buckle  
 (153) Belt restraint B-pillar or door frame attachment point  
 (154) Other restraint system component (specify):  
 (155) Head restraint system  
 (160) Other occupants (specify):  
 (161) Interior loose objects  
 (162) Child safety seat (specify):  
 (163) Other interior object (specify):

## AIR BAG

- (170) Air bag-driver side  
 (175) Air bag compartment cover-driver side  
 (180) Air bag-passenger side  
 (185) Air bag compartment cover-passenger side  
 (190) Other air bag (specify):  
 (195) Other air bag compartment cover (specify):

## ROOF

- (201) Front header  
 (202) Rear header  
 (203) Roof left side rail  
 (204) Roof right side rail  
 (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe pan)  
 (252) Floor or console mounted transmission lever, including console  
 (253) Parking brake handle  
 (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)  
 (302) Backlight storage rack, door, etc.  
 (303) Other rear object (specify):

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration  
 (402) Steering control devices (attached to OEM steering wheel)  
 (403) Steering knob attached to steering wheel  
 (405) Replacement steering wheel (i.e., reduced diameter)  
 (406) Joy stick steering controls  
 (407) Wheelchair tie-downs  
 (408) Modification to seat belts, (specify):  
 (409) Additional or relocated switches, (specify):  
 (410) Raised roof  
 (411) Wall mounted head rest (used behind wheel chair)  
 (412) Other adaptive device (specify):

## CONFIDENCE LEVEL OF CONTACT POINT

- (1) Certain  
 (2) Probable  
 (3) Possible  
 (9) Unknown

**AUTOMATIC RESTRAINTS**

NOTES: Encode the data for each applicable front seat position. The attribute for the variables may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

**AIR BAGS**

		Frontal Air Bags--Left Front	Frontal Air Bags--Right Front	Other Air Bag
F I R S T	Availability/Function	0	0	
	Deployment	0	0	
	Failure	0	0	

**Air Bag System Availability/Function**

- (0) Not equipped/not available  
(1) Air bag

**Non-functional**

- (2) Air bag disconnected (specify):  
\_\_\_\_\_  
(3) Air bag not reinstalled  
(9) Unknown

**Air Bag System Deployment****(This Occupant Position)**

- (0) Not equipped/not available  
(1) Deployed during accident (as a result of impact)  
(2) Deployed inadvertently just prior to accident  
(3) Deployed, accident sequence undetermined  
(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)  
(5) Unknown if deployed  
(7) Nondeployed  
(9) Unknown

**Are There Indications of Air Bag****System Failure? (This Occupant Position)**

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify):  
\_\_\_\_\_  
(9) Unknown

**AUTOMATIC BELTS**

		Left	Right
F I R S T	A-Availability/Function	0	0
	B-Use	0	0
	C-Type	0	0
	D-Proper Use	0	0
	E-Failure Modes	0	0

**A-Automatic (Passive) Belt System Availability/Function**

- (0) Not equipped/not available  
(1) 2 point automatic belts  
(2) 3 point automatic belts  
(3) Automatic belts - type unknown

**Non-functional**

- (4) Automatic belts destroyed or rendered inoperative  
(9) Unknown

**B-Automatic (Passive) Belt System Use**

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Automatic belt in use  
(2) Automatic belt not in use (manually disconnected, motorized track inoperative)  
(3) Automatic belt use unknown  
(9) Unknown

**C-Automatic (Passive) Belt System Type**

- (0) Not equipped/not available  
(1) Non-motorized system  
(2) Motorized system  
(9) Unknown

**D-Proper Use of Automatic (Passive) Belt System**

- (0) Not equipped/not available/not used  
(1) Automatic belt used properly  
(2) Automatic belt used properly with child safety seat

**Automatic Belt Used Improperly**

- (3) Automatic shoulder belt worn under arm  
(4) Automatic shoulder belt worn behind back  
(5) Automatic belt worn around more than one person  
(6) Lap portion of automatic belt worn on abdomen  
(7) Automatic lap and shoulder belt or automatic shoulder belt used improperly with child safety seat (specify):  
\_\_\_\_\_

- (8) Other improper use of automatic belt system (specify):  
\_\_\_\_\_

- (9) Unknown

**E-Automatic (Passive) Belt Failure Modes During Accident**

- (0) Not equipped/not available/not in use  
(1) No automatic belt failure(s)  
(2) Torn webbing (stretched webbing not included)  
(3) Broken buckle or latchplate  
(4) Upper anchorage separated  
(5) Other anchorage separated (specify):  
\_\_\_\_\_

- (6) Broken retractor

- (7) Combination of above (specify):

- (8) Other automatic belt failure (specify):  
\_\_\_\_\_

- (9) Unknown



# MANUAL RESTRAINTS

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for the variable may be found below. Restraint systems should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

If a child safety seat is present, encode the data on the back of this page 11.

If the vehicle has automatic restraints available, encode the appropriate data on page 6.

		Left	Center	Right
FIRST	A-Availability	4		4
	B-Evidence of usage	04		04
	C-Used in this crash?	00		00
	D-Proper Use	0		0
	E-Failure Modes	0		0
	F-Anchorage Adjustment	1		1
SECOND	A-Availability	4	3	4
	B-Evidence of usage	04	00	04
	C-Used in this crash?	00	00	00
	D-Proper Use	0	0	0
	E-Failure Modes	0	0	0
	F-Anchorage Adjustment	1	0	1
OTHER	A-Availability			
	B-Evidence of usage			
	C-Used in this crash?			
	D-Proper Use			
	E-Failure Modes			
	F-Anchorage Adjustment			

## A-Manual (Active) Belt System Availability

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available - type unknown

### Integral Belt Partially Destroyed

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

- (9) Unknown

## B/C-Manual (Active) Belt System Use

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperable (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used - type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat - type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

## D-Proper Use of Manual (Active) Belts

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

### Belt Used Improperly

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):
- (8) Other improper use of manual belt system (specify):

- (9) Unknown

## E-Manual (Active) Belt Failure Modes During Accident

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):
- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other manual belt failure (specify):
- (9) Unknown

## F-Shoulder Belt Upper Anchorage Adjustment

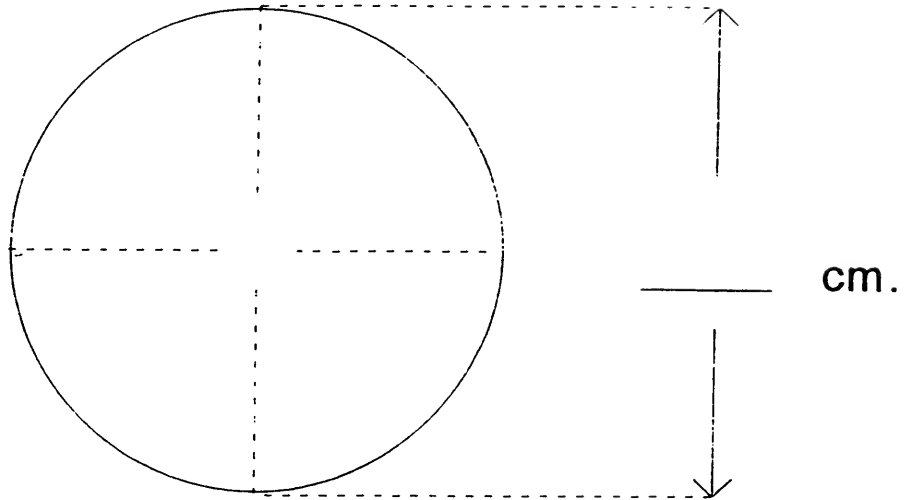
- (0) No shoulder belt
- (1) No upper anchorage adjustment for shoulder belt

### Adjustable shoulder Belt Upper Anchorage

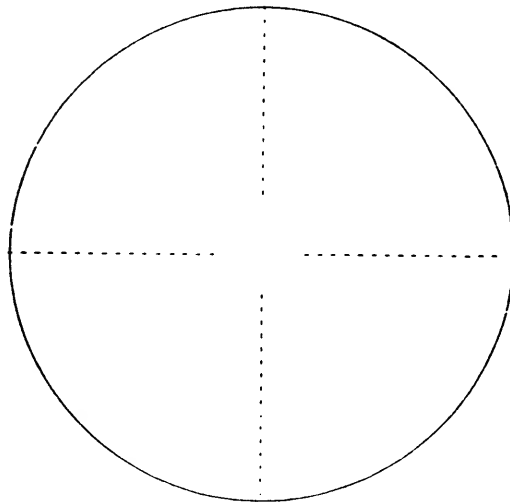
- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

**DRIVER AIR BAG DAMAGE AND CONTACT SKETCHES**

**1. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Front)**



**2. SKETCH DAMAGE AND CONTACT EVIDENCE ON DRIVER AIR BAG (Back)**

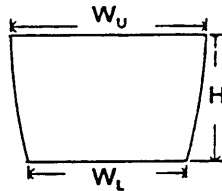


## DRIVER AIR BAG SKETCHES (Cont'd)

### 3. DRIVER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_

height ( $H$ ) \_\_\_\_\_



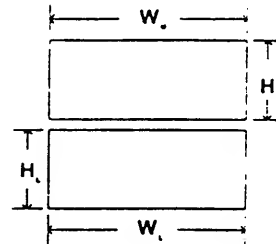
### 4. DRIVER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_ width ( $W_L$ ) \_\_\_\_\_

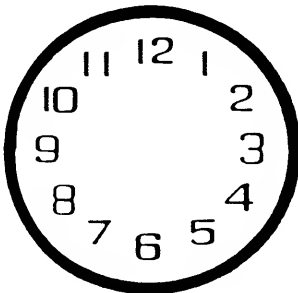
height ( $H_U$ ) \_\_\_\_\_ height ( $H_L$ ) \_\_\_\_\_

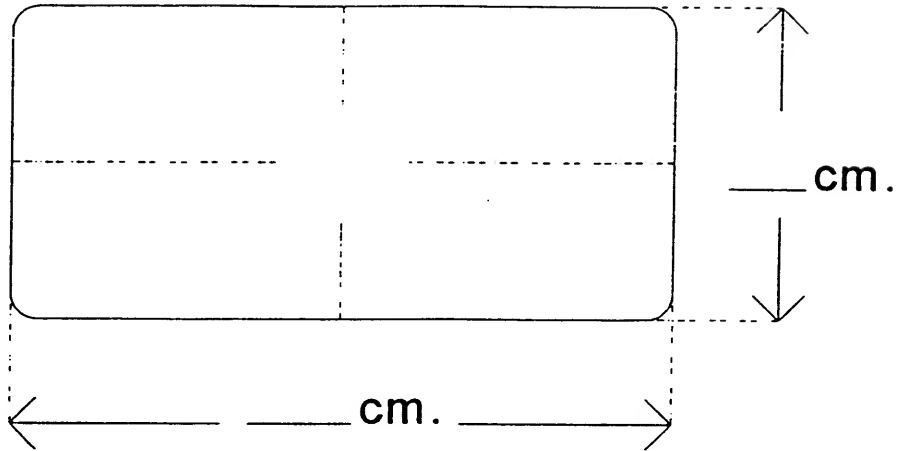
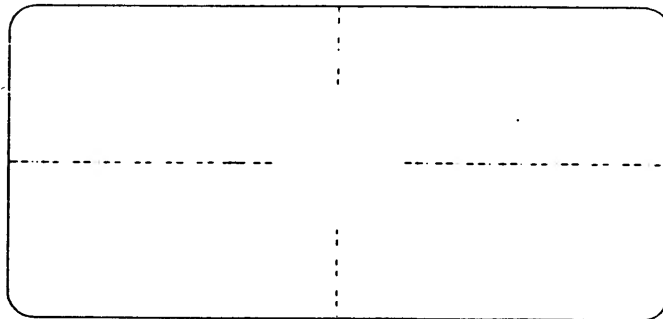


### 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

### 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

### 7. SKETCH LOCATION OF CIRCULAR AIR BAG VENT PORTS



**PASSENGER AIR BAG DAMAGE AND CONTACT SKETCHES****1. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Front)****2. SKETCH DAMAGE AND CONTACT EVIDENCE ON PASSENGER AIR BAG (Back)**

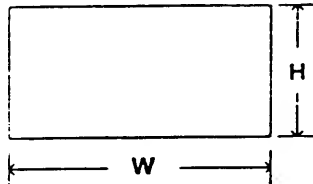


## PASSENGER AIR BAG SKETCHES (Cont'd)

### 3. PASSENGER AIR BAG MODULE COVER FLAP SIZE (SINGLE)

width (W) \_\_\_\_\_

height (H) \_\_\_\_\_



### 4. PASSENGER AIR BAG MODULE COVER FLAP SIZE (DOUBLE)

a. Upper Flap

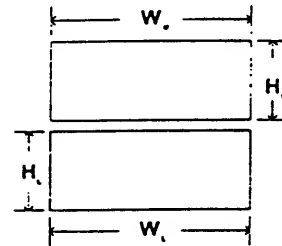
b. Lower Flap

width ( $W_U$ ) \_\_\_\_\_

width ( $W_L$ ) \_\_\_\_\_

height ( $H_U$ ) \_\_\_\_\_

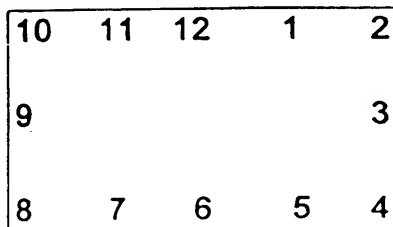
height ( $H_L$ ) \_\_\_\_\_



### 5. SKETCH OF OTHER TYPE OF AIR BAG MODULE FLAP AND SIZE

### 6. SKETCH OF OTHER TYPE OF AIR BAG VENT PORTS

### 7. SKETCH LOCATION OF RECTANGULAR AIR BAG VENT PORTS



**"OTHER" AIR BAG DAMAGE AND CONTACT SKETCHES**

1. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Front)

2. SKETCH DAMAGE AND CONTACT EVIDENCE ON "OTHER" AIR BAG (Back)

**"OTHER" AIR BAG SKETCHES (Cont'd)**

**3. SKETCH AIR BAG MODULE FLAP AND SIZE OR OPENING FOR AIRBAG**

**4. SKETCH AIR BAG VENT PORTS**

**HEAD RESTRAINTS/SEAT EVALUATION**

**NOTES:** Encode the applicable data for each seat position in the vehicle. The attribute for these variables may be found at the bottom of the page. Head restraint type/damage and seat type/performance should be assessed during the vehicle inspection then coded on the Occupant Assessment Form.

		Left	Center	Right
<b>FIRST</b>	A-Head Restraint Type/Damage	3		3
	B-Seat Type	02		02
	C-Seat Orientation	1		1
	D-Seat Track Position	2		3
	E-Seat Back Incline Pre/Post Impact	14		14
	F-Seat Performance	1		1
<b>SECOND</b>	A-Head Restraint Type/Damage	0	0	0
	B-Seat Type	03	03	03
	C-Seat Orientation	1	1	1
	D-Seat Track Position	1	1	1
	E-Seat Back Incline Pre/Post Impact	01	01	01
	F-Seat Performance	1	1	1
<b>THIRD</b>	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			
<b>OTHER</b>	A-Head Restraint Type/Damage			
	B-Seat Type			
	C-Seat Orientation			
	D-Seat Track Position			
	E-Seat Back Incline Pre/Post Impact			
	F-Seat Performance			

**DESCRIBE ANY INDICATION OF ABNORMAL OCCUPANT POSTURE  
(I.E., UNUSUAL OCCUPANT CONTACT PATTERN)**



## CHILD SAFETY SEAT FIELD ASSESSMENT

When a child safety seat is present enter the occupant's number in the first row and complete the column below the occupant's number using the codes listed below. Complete a column for each child safety seat present.

Occupant Number						
1. Type of Child Safety Seat						
2. Child Safety Seat Orientation		Not Applicable				
3. Child Safety Seat Harness Usage						
4. Child Safety Seat Shield Usage						
5. Child Safety Seat Tether Usage						
6. Child Safety Seat Make/Model	Specify Below for Each Child Safety Seat					

### 1. Type of Child Safety Seat

- (0) No child safety seat
- (1) Infant seat
- (2) Toddler seat
- (3) Convertible seat
- (4) Booster seat
- (7) Other type child safety seat (specify):

- (8) Unknown child safety seat type
- (9) Unknown if child safety seat used

### 2. Child Safety Seat Orientation

- (00) No child safety seat
- Designed for Rear Facing for This Age/Weight
- (01) Rear facing
- (02) Forward facing
- (08) Other orientation (specify):

- (09) Unknown orientation

Designed for Forward Facing for This Age/Weight

- (11) Rear facing
- (12) Forward facing
- (18) Other orientation (specify):

- (19) Unknown orientation

Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight

- (21) Rear facing
- (22) Forward facing
- (28) Other orientation (specify):

- (29) Unknown orientation

- (99) Unknown if child safety seat used

### 3. Child Safety Seat Harness Usage

### 4. Child Safety Seat Shield Usage

### 5. Child Safety Seat Tether Usage

Note: Options Below Are Used for Variables 3-5.

- (00) No child safety seat

Not Designed with Harness/Shield/Tether

- (01) After market harness/shield/tether added, not used
- (02) After market harness/shield/tether used
- (03) Child safety seat used, but no after market harness/shield/tether added
- (09) Unknown if harness/shield/tether added or used

Designed With Harness/Shield/Tether

- (11) Harness/shield/tether not used
- (12) Harness/shield/tether used
- (19) Unknown if harness/shield/tether used

Unknown If Designed With Harness/Shield/Tether

- (21) Harness/shield/tether not used
- (22) Harness/shield/tether used
- (29) Unknown if harness/shield/tether used

- (99) Unknown if child safety seat used

### 6. Child Safety Seat Make/Model

(Specify make/model and occupant number)

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**HEAD RESTRAINTS/SEAT EVALUATION****A-Head Restraint Type/Damage by Occupant at This Occupant Position**

- (0) No head restraints
- (1) Integral — no damage
- (2) Integral — damaged during accident
- (3) Adjustable — no damage
- (4) Adjustable — damaged during accident
- (5) Add-on — no damage
- (6) Add-on — damaged during accident
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**B-Seat Type (this Occupant Position)**

- (00) Occupant not seated or no seat
- (01) Bucket
- (02) Bucket with folding back
- (03) Bench
- (04) Bench with separate back cushions
- (05) Bench with folding back(s)
- (06) Split bench with separate back cushions
- (07) Split bench with folding back(s)
- (08) Pedestal (i.e., column supported)
- (09) Box mounted seat (i.e., van type)
- (10) Other seat type (specify): \_\_\_\_\_
- (99) Unknown

**C-Seat Orientation (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) Forward facing seat
- (2) Rear facing seat
- (3) Side facing seat (inward)
- (4) Side facing seat (outward)
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

**D-Seat Track Adjusted Position Prior To Impact**

- (0) Occupant not seated or no seat
- (1) Non-adjustable seat track

**Adjustable Seat Track**

- (2) Seat at forward most track position
- (3) Seat between forward most and middle track positions
- (4) Seat at middle track position
- (5) Seat between middle and rear most track positions
- (6) Seat at rear most track position
- (9) Unknown

**E-Seat Back Incline Prior and Post Impact**

- (00) Occupant not seated or no seat
- (01) Not adjustable

**Upright prior to impact**

- (11) Moved to completely rearward position
- (12) Moved to rearward midrange position
- (13) Moved to slightly rearward position
- (14) Retained pre-impact position
- (15) Moved to slightly forward position
- (16) Moved to forward midrange position
- (17) Moved to completely forward position

**Slightly reclined prior to impact**

- (21) Moved to completely rearward position
- (22) Moved to rearward midrange position
- (23) Retained pre-impact position
- (24) Moved to upright position
- (25) Moved to slightly forward position
- (26) Moved to forward midrange position
- (27) Moved to completely forward position

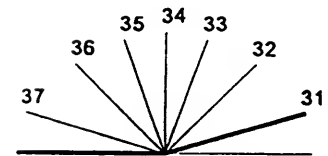
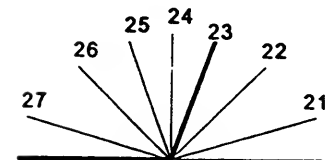
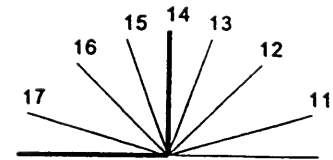
**Completely reclined prior to impact**

- (31) Retained pre-impact position
- (32) Moved to rearward midrange position
- (33) Moved to slightly rearward position
- (34) Moved to upright position
- (35) Moved to slightly forward position
- (36) Moved to forward midrange position
- (37) Moved to completely forward position

- (99) Unknown

**F-Seat Performance (this Occupant Position)**

- (0) Occupant not seated or no seat
- (1) No seat performance failure(s)
- (2) Seat adjusters failed
- (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_
- (4) Seat tracks/anchors failed
- (5) Deformed by impact of occupant
- (6) Deformed by passenger compartment intrusion (specify): \_\_\_\_\_
- (7) Combination of above (specify): \_\_\_\_\_
- (8) Other (specify): \_\_\_\_\_
- (9) Unknown

Coding diagrams for *Seat Back Incline Position Prior and Post Impact*

**EJECTION/ENTRAPMENT DATA**

Complete the following if the researcher has any indication that an occupant was either ejected from or entrapped in the vehicle. Code the appropriate data on the Occupant Assessment Form.

**EJECTION** No ☒ Yes ☐

Describe indications of ejection and body parts involved in partial ejection(s):

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Occupant Number						
Ejection						
(Note on Vehicle Interior Sketch) Ejection Area						
Ejection Medium						
Medium Status						

**Ejection**

- (1) Complete ejection  
(2) Partial ejection  
(3) Ejection, Unknown degree  
(9) Unknown

**Ejection Area**

- (1) Windshield  
(2) Left front  
(3) Right front  
(4) Left rear  
(5) Right rear  
(6) Rear

**(7) Roof**

- (8) Other area (e.g., back of pickup, etc.) (specify):

(9) Unknown

**Ejection Medium**

- (1) Door/hatch/tailgate  
(2) Nonfixed roof structure  
(3) Fixed glazing  
(4) Nonfixed glazing (specify):

**(5) Integral structure**

- (8) Other medium (specify):

(9) Unknown

**Medium Status (Immediately Prior to Impact)**

- (1) Open  
(2) Closed  
(3) Integral structure  
(9) Unknown

**ENTRAPMENT** No ☒ Yes ☐

Describe entrapment mechanism:

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Component(s):

---

(Note on vehicle interior sketch)

**NASS CDS INTERVIEW FORM:  
CASE VEHICLE DRIVER**





U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# INTERVIEW FORM (A)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10

Interviewee(s) Role or Name(s): \_\_\_\_\_

2. Case Number - Stratum 9618

DRIVER of CASE 18h

3. Vehicle Number 01

Phone number: \_\_\_\_\_

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

## DRIVER'S DESCRIPTION OF ACCIDENT EVENTS

I was on [REDACTED] going so getting  
READY to curve East. I saw [REDACTED] and  
tried to get out of way

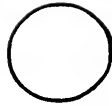
## OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS

## SPECIFIC QUESTIONS TO ASK INTERVIEWEE

unk if center Arm Rest up or Down.  
(Down per on-scene photos.)

[REDACTED] & son [REDACTED]  
MORTUARY

## ACCIDENT DIAGRAM



NORTH

Use this diagram to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

\* ACCORDING to MORTician RF occupant had 4 Top front teeth Knocked out (not broken off) Bottom teeth OK

RF occupant had no injuries from nose upwards on face. All injuries below nose. HAD abrasions to neck primarily from Adams apple to Rear.

## CRASH DATA INFORMATION

IF POSSIBLE OBTAIN THIS INFORMATION FROM THE DRIVER:

SOURCE OF INFORMATION:	<input checked="" type="checkbox"/> Driver <input type="checkbox"/> Other occupant <input type="checkbox"/> Relative/friend	55 mph.
TRAVEL DIRECTION?	<input type="checkbox"/> North <input checked="" type="checkbox"/> South <input checked="" type="checkbox"/> East <input type="checkbox"/> West (Or where were they coming from or going to?)	
LANE?	<input checked="" type="checkbox"/> 1 <input type="checkbox"/> 2 <input type="checkbox"/> 3 <input type="checkbox"/> 4 <input type="checkbox"/> Other Note: lane 1 is the right curb lane	
ROAD CONDITION?	<input checked="" type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Snow <input type="checkbox"/> Slush <input type="checkbox"/> Ice <input type="checkbox"/> Sand, dirt, oil <input type="checkbox"/> Other (specify)	
WEATHER CONDITIONS? (Check all that apply)	<input checked="" type="checkbox"/> No adverse conditions <input type="checkbox"/> Rain <input type="checkbox"/> Fog <input type="checkbox"/> Sleet <input type="checkbox"/> Hail <input type="checkbox"/> Snow <input type="checkbox"/> Other (specify)	
SIGN OR SIGNAL PRESENT? (check all that apply)	<input type="checkbox"/> Traffic control signal (includes flashing beacons, lane control signals, and green / amber / red signal) <input type="checkbox"/> Stop sign <input type="checkbox"/> Yield sign <input type="checkbox"/> School zone sign <input type="checkbox"/> Other regulatory sign (No "U" turn, left turn only, wrong way, etc.) specify: _____ <input checked="" type="checkbox"/> Warning sign (Winding road sign, stop ahead, intersection signs, etc.) specify: <u>CURVE Ahead</u> <input type="checkbox"/> Miscellaneous control (including railroad controls) specify: _____ <input type="checkbox"/> None <input type="checkbox"/> Unknown	
WAS THE CONTROL FUNCTIONING PROPERLY?	<input type="checkbox"/> No traffic control device present <input type="checkbox"/> Not functioning properly (includes defaced, badly worn, covered with snow, rotated etc.) specify: _____ <input type="checkbox"/> Functioning properly <input type="checkbox"/> Unknown	
SPEED BEFORE THE IMPACT? (in mph)	<input type="checkbox"/> Stopped <input type="checkbox"/> 11-20 <input type="checkbox"/> 31-40 <input type="checkbox"/> 51-60 <input type="checkbox"/> 70+ <input type="checkbox"/> 1-10 <input checked="" type="checkbox"/> 21-30 <input type="checkbox"/> 41-50 <input type="checkbox"/> 61-70 <input type="checkbox"/> Unknown	
BEFORE IMPACT, INTENDING TO ... ? (check all that apply)	<input type="checkbox"/> Go straight <input type="checkbox"/> Stopped <input checked="" type="checkbox"/> Turn left <input type="checkbox"/> Turn right <input type="checkbox"/> Slow down <input type="checkbox"/> Accelerate <input type="checkbox"/> Back up <input type="checkbox"/> Change lanes to right <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Change lanes to left	
CONTROL LOSS DUE TO WEATHER OR MECHANICAL PROBLEMS?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes (describe)	
AVOIDANCE ACTIONS?	<input type="checkbox"/> None <input type="checkbox"/> Braking with lock-up <input type="checkbox"/> Accelerating <input type="checkbox"/> Unknown <input type="checkbox"/> Braking without lock-up <input checked="" type="checkbox"/> Steering left <input type="checkbox"/> Other- specify: <input type="checkbox"/> Releasing brakes <input type="checkbox"/> Steering right	
LOCATION OF VEHICLE AT TIME OF IMPACT?	<input checked="" type="checkbox"/> Original travel lane <input type="checkbox"/> Different travel lane <input type="checkbox"/> In intersection <input type="checkbox"/> Off roadway to right <input type="checkbox"/> Off roadway to left <input type="checkbox"/> Other (specify): _____	
SPEED AT THE TIME OF IMPACT? (in mph)	<input type="checkbox"/> Stopped <input checked="" type="checkbox"/> 11-20 <input type="checkbox"/> 31-40 <input type="checkbox"/> 51-60 <input type="checkbox"/> 70+ <input type="checkbox"/> 1-10 <input type="checkbox"/> 21-30 <input type="checkbox"/> 41-50 <input type="checkbox"/> 61-70 <input type="checkbox"/> Unknown	
DESCRIBE ALL THE IMPACTS to the vehicle and how this vehicle moved to its stopped position, after the collision?	only 1 impact	

**VEHICLE INFORMATION****ROLLOVER DATA**

DID THIS VEHICLE ROLL OVER DURING THE CRASH?

☐ YES -- ASK THE FOLLOWING QUESTIONS
 ☒ NO -- SKIP TO "FIRE DATA" BELOW
 ☐ UNKNOWN -- SKIP TO "FIRE DATA" BELOW

ROLLOVER BEGAN

☐ On roadway    ☐ On shoulder    ☐ On roadside or median  
☐ Unknown

ROLLOVER CAUSE?

☐ Other vehicle (specify vehicle number) \_\_\_\_\_  
☐ Contact to object (specify): \_\_\_\_\_  
☐ Other cause (specify): \_\_\_\_\_  
☐ Unknown

DIRECTION OF VEHICLE ROLL?

☐ Toward the right (passenger side)  
☐ Toward the left (driver side)  
☐ End-over-end  
☐ Unknown

NUMBER OF TURNS

\_\_\_\_\_ Number of QUARTER TURNS    ☐ Unknown  
 \_\_\_\_\_ Number of COMPLETE TURNS

PLANE IN CONTACT WITH GROUND AT FINAL REST?

☐ Left side    ☐ Top  
☐ Right side    ☐ Wheels  
☐ Unknown

**FIRE DATA**

DID THIS VEHICLE EXPERIENCE A FIRE?

☐ YES -- ASK THE FOLLOWING QUESTIONS
 ☒ NO -- SKIP THIS SECTION
 ☐ UNKNOWN -- SKIP THIS SECTION

FIRE STARTED, OR SMOKE WAS FIRST SEEN ...

☐ Under the hood    ☐ In the trunk/cargo area  
☐ Behind the instrument panel    ☐ Under the vehicle  
☐ In the passenger compartment    ☐ From other involved vehicle  
☐ Unknown

FIRE START WITH THE ELECTRICAL SYSTEM?

☐ No    ☐ Unknown

☐ Yes (specify):

FIRE START WITH THE FUEL SYSTEM?

☐ No    ☐ Unknown

☐ Yes -- specify Which part of the fuel system may have been involved?

☐ Fuel tank  
☐ Fuel lines  
☐ Engine compartment (specify component if known)  
☐ Unknown

Describe any additional rollover or fire information here:



### ADDITIONAL VEHICLE INFORMATION

<b>YEAR, MAKE AND MODEL?</b>	Year: 19 <u>95</u> Make: <u>Chevrolet</u> Model: <u>Lumina</u>
<b>PREVIOUS OR POST-CRASH DAMAGE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - describe: <input type="checkbox"/> Unknown
<b>DOORS OR HATCH OPEN DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> HATCH <input type="checkbox"/> OTHER _____ <input type="checkbox"/> Unknown
<b>WINDOWS BREAK DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No                                      Check all that apply <input type="checkbox"/> Yes <input type="checkbox"/> WS <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> BL <input type="checkbox"/> Roof <input type="checkbox"/> Other <input type="checkbox"/> Unknown
<b>WINDOW PRECRASH STATUS</b>	<div style="text-align: center; margin-bottom: 10px;"><i>All up had A/C ON</i></div> <input type="checkbox"/> WS <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> BL <input type="checkbox"/> Roof <input type="checkbox"/> Other  <div style="display: flex; justify-content: space-between; font-size: small;"> <span>"O" = open</span> <span>"C" = Closed</span> </div> <div style="display: flex; justify-content: space-between; font-size: small;"> <span>"P" = partially open</span> <span>"U" = Unknown</span> </div>
<b>GLOVE COMPARTMENT DOOR OPEN DURING THE CRASH?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - describe: <input type="checkbox"/> Unknown
<b>CARGO IN THE VEHICLE?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Yes - describe: <i>swim bag</i> Approximate weight - <u>5</u> pounds <i>2.3 kg</i>
<b>VEHICLE MILEAGE</b>	_____ miles <input type="checkbox"/> Unknown
<b>IF VEHICLE HAS NOT BEEN INSPECTED</b>	Current location of the vehicle: _____ _____ Contact person: _____ _____
Detail any notes, questions to ask interviewee (i.e., rescue personnel damage to vehicle) or directions to vehicle location:	

**SPECIAL CRASH INVESTIGATION ADDENDUM: DRIVER INFORMATION**

Do you recall the type of development in the area of the crash?	<input type="checkbox"/> Residential <input type="checkbox"/> Commercial <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Agricultural <input type="checkbox"/> Undeveloped <input type="checkbox"/> School <input type="checkbox"/> Other: _____
What were the weather conditions at the time of the crash?	<input checked="" type="checkbox"/> Clear (no clouds, no precipitation) <input type="checkbox"/> Cloudy (partially cloudy, no precipitation) <input type="checkbox"/> Overcast (full cloud cover, no precipitation) <input type="checkbox"/> Precipitating <input type="checkbox"/> Unknown
What was the type of precipitation?	<input checked="" type="checkbox"/> No precipitation <input type="checkbox"/> Unknown <input type="checkbox"/> Raining <input type="checkbox"/> Freezing rain <input type="checkbox"/> Sleet <input type="checkbox"/> Snowing <input type="checkbox"/> Hailing
What was the condition of the road surface?	<input checked="" type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Snowy, slushy <input type="checkbox"/> Icy <input type="checkbox"/> Other (e.g., sand, dirt, oil on surface, etc.) <input type="checkbox"/> Unknown
How would you describe the amount of traffic at the time of the crash?	<input type="checkbox"/> Heavy <input type="checkbox"/> Moderate <input checked="" type="checkbox"/> Light <input type="checkbox"/> No other traffic present
What is your occupation?	<input type="checkbox"/> Professional <input type="checkbox"/> Technical <input type="checkbox"/> Government official <input type="checkbox"/> Management <input type="checkbox"/> Proprietors <input type="checkbox"/> Sales <input type="checkbox"/> Clerical <input type="checkbox"/> Craftsman and foreman <input type="checkbox"/> Service worker <input type="checkbox"/> Student <input type="checkbox"/> Farmers and farm-managers <input type="checkbox"/> Farm labors and foreman <input type="checkbox"/> Private household worker <input checked="" type="checkbox"/> Housewife <input type="checkbox"/> Other: _____
How long have you driven this vehicle?	Years: _____ Months: <u>1</u>
How many miles do you think that you have driven it in the last 12-month period?	Miles: <u>15-18,000 year</u>
How often do you drive this particular roadway?	<input checked="" type="checkbox"/> Daily <input type="checkbox"/> Twice weekly <input type="checkbox"/> Once weekly <input type="checkbox"/> Twice monthly <input type="checkbox"/> Once monthly <input type="checkbox"/> Very infrequently <input type="checkbox"/> First time on road
Where were you coming from just prior to the crash?	<input checked="" type="checkbox"/> Home <input type="checkbox"/> Work <input type="checkbox"/> School <input type="checkbox"/> Shopping <input type="checkbox"/> Social/recreational <input type="checkbox"/> Restaurant <input type="checkbox"/> Personal business <input type="checkbox"/> Other: _____
Where were you intending to go when the crash occurred?	<input type="checkbox"/> Home <input type="checkbox"/> Work <input type="checkbox"/> School <input type="checkbox"/> Shopping <input checked="" type="checkbox"/> Social/recreational <input type="checkbox"/> Restaurant <input type="checkbox"/> Personal business <input type="checkbox"/> Other: <u>to pool</u>

**HOW MANY PEOPLE WERE IN THE VEHICLE AT THE TIME OF THE CRASH?**

DRIVER		OCCUPANT # 2	OCCUPANT # 3
<b>SEATING POSITION?</b> Front Left (FL)      Second Left (2L) Front Middle (FM)    Second Middle (2M) Front Right (FR)     Second Right (2R)  Third Left (3L)      Other (SPECIFY in block) Third Middle (3M) Third Right (3R)		<b>FRONT LEFT</b>	
<b>SEX, HEIGHT, WEIGHT, AND AGE?</b>  <b>CIRCLE DRIVER'S RACE:</b> White    Black    American Indian    160 Eskimo or Aleut    Asian or Pacific Islander    26.2  Other (specify): Unknown		[ ] M <input checked="" type="checkbox"/> F - Not pregnant [ ] F - Pregnant - # of months _____ [ ] F - Unk. if pregnant  HEIGHT: 5'3" WEIGHT: 190 AGE: 27  DRIVER OF HISPANIC ORIGIN? [ ] Y <input checked="" type="checkbox"/> N [ ] U	
<b>OCCUPANT POSTURE</b> A) Kneeling or standing on seat B) Lying on or across seat C) Kneeling, standing or sitting in front of seat D) Sitting sideways, turned to side or back E) Sitting on console F) Lying back in reclined position G) Other (specify) H) Unknown		[ ] Leaning to left [ ] Leaning to right <input checked="" type="checkbox"/> Sitting upright [ ] Unknown  Indicate all letters that apply and describe if other than above	
<b>FEET AND HANDS/ARMS LOCATION JUST PRIOR TO IMPACT</b>  <b>FEET</b> A) On floor or foot controls B) One or both on dash C) One or both on seat D) Other (specify) E) Unknown  <b>HANDS / ARMS</b> F) Both hands on steering wheel G) One on wheel, other hand resting or adjusting a control (specify hand on wheel and control involved) H) Dialing a cellular phone (specify location and type of phone) I) Holding a cellular phone (specify location and type of phone) J) Bracing with one or both hands K) On lap L) One or both out of window (specify) M) Other (specify) N) Unknown		[ ] Leaning to left [ ] Leaning to right <input checked="" type="checkbox"/> Sitting upright [ ] Unknown  Indicate all letters that apply and describe if other than above	

**OCCUPANT DATA QUESTIONS (continued)**

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>3</u>																																																
<b>BACK UP AGAINST THE SEAT BACK?</b>	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No (describe) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown																																																
<b>ADJUSTABLE SEAT TRACK, IF "YES" WHERE WAS THE TRACK PRIOR TO IMPACT?</b>	<input type="checkbox"/> Not adjustable <input checked="" type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input checked="" type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Not adjustable <input type="checkbox"/> Seat all the way forward <input type="checkbox"/> Between forward and middle <input type="checkbox"/> At middle position <input type="checkbox"/> Between middle and rear position <input type="checkbox"/> Seat all the way rearward <input type="checkbox"/> Unknown																																																
<b>ADJUSTABLE SEAT BACK, IF "YES" WHERE WAS THE BACK PRE AND POST IMPACT</b>	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input checked="" type="checkbox"/> Completely upright</td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/> Slightly reclined</td> <td><input checked="" type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input checked="" type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Slightly reclined	<input checked="" type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/> Completely upright</td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input checked="" type="checkbox"/> Slightly reclined</td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright	<input checked="" type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown	<table border="0"> <tr> <td><u>PRE</u></td> <td><u>POST</u></td> </tr> <tr> <td><input checked="" type="checkbox"/> Not adjustable</td> <td><input type="checkbox"/> Not adjustable</td> </tr> <tr> <td><input type="checkbox"/> Completely upright</td> <td><input type="checkbox"/> Completely upright</td> </tr> <tr> <td><input type="checkbox"/> Slightly reclined</td> <td><input type="checkbox"/> Slightly reclined</td> </tr> <tr> <td><input type="checkbox"/> Completely reclined</td> <td><input type="checkbox"/> Completely reclined</td> </tr> <tr> <td><input type="checkbox"/> Slightly forward of upright</td> <td><input type="checkbox"/> Slightly forward of upright</td> </tr> <tr> <td><input type="checkbox"/> Completely forward</td> <td><input type="checkbox"/> Completely forward</td> </tr> <tr> <td><input type="checkbox"/> Unknown</td> <td><input type="checkbox"/> Unknown</td> </tr> </table>	<u>PRE</u>	<u>POST</u>	<input checked="" type="checkbox"/> Not adjustable	<input type="checkbox"/> Not adjustable	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Completely upright	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Slightly reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Completely reclined	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Slightly forward of upright	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Completely forward	<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown
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<input type="checkbox"/> Unknown	<input type="checkbox"/> Unknown																																																		

**TILT STEERING COLUMN ADJUSTMENT PRIOR TO IMPACT**

☐ Not adjustable    ☐ Full up    ☐ Between full up and center  
☒ Center    ☐ Between center and full down  
☐ Full down    ☐ Unknown

**TELESCOPING STEERING COLUMN PRIOR TO IMPACT**

☒ Not adjustable    ☐ Full back    ☐ Between full back and midpoint  
☐ Midpoint    ☐ Between midpoint and full forward  
☐ Full forward    ☐ Unknown

**Did this vehicle have a cellular phone in it during the crash?**

☒ No  
☐ Yes - describe type: \_\_\_\_\_  
 (e.g., portable, mounted in vehicle, flip phone, etc.)

☐ Unknown

**(Note to researcher: try to determine any driver distractions without implying fault)**

**Was the driver doing any of the following? (check all that apply - and specify)**

- ☐ Talking to or listening to another occupant (specify):
- ☐ Was there a moving object in vehicle (specify):
- ☐ Talking or listening on a cellular phone (specify):
- ☐ Dialing a cellular phone (specify):
- ☐ Adjusting climate control (specify):
- ☐ Adjusting radio, CD or cassette player (specify):
- ☐ Using other device or object in vehicle (specify):
- ☐ Sleepy / asleep (specify):
- ☐ Distracted by outside person, object, or event (specify):
- ☐ Eating or drinking (specify):
- ☐ Smoking related (specify):
- ☐ Other (specify):
- ☐ Unknown



## RESTRAINT INFORMATION

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>3</u>
<b>TYPE OF SEAT BELT AVAILABLE</b>  NOTE: If a belt is not available for a seat position -- describe reason	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:
<b>DO BELTS MOVE ALONG A MOTORIZED TRACK FOR THIS SEAT?</b> (i.e., 2-point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *
<b>IF "YES", WERE THEY WORKING PROPERLY?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)
<b>ARE ANY BELTS ATTACHED TO THE DOOR?</b> (i.e., 3-point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *
<b>IF "YES", DOES IT CROSS:</b>	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both
<b>OCCUPANT WEARING ANY SEATBELT?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>SKIP THE FOLLOWING IF NO SEAT BELT WAS WORN</b>			
<b>TYPE OF BELT WORN?</b>	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown
<b>LAP BELT SITUATED?</b>	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input checked="" type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input checked="" type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
<b>SHOULDER BELT SITUATED?</b>	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): <i>in child safety seat</i> <input type="checkbox"/> Unknown
Describe any breaks, tears, or failures to any of the seat belts:			

## EJECTION, ENTRAPMENT, MOBILITY INFORMATION

	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>3</u>
<b>ANY PART OF BODY THROWN OUTSIDE THE VEHICLE DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.
<b>ANYONE PINNED IN THE VEHICLE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment
<b>HOW DID OCCUPANT(S) EXIT THE VEHICLE?</b>	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input checked="" type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input checked="" type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input checked="" type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown

Further describe any ejection, entrapment, or mobility information here:

**AIR BAG INFORMATION**

WAS THIS VEHICLE EVER EQUIPPED WITH AN AIR BAG?

☒ YES (IF "YES" COMPLETE THIS SECTION)☐ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER SIDE FRONTAL	PASSENGER SIDE FRONTAL OCCUPANT # <u>2</u>	"OTHER" AIR BAG SPECIFY: _____ OCCUPANT # _____
<b>VEHICLE BEEN IN ANY PREVIOUS CRASHES?</b>  <input checked="" type="checkbox"/> NO <input type="checkbox"/> YES - continue to right <input type="checkbox"/> UNKNOWN - go to box below	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED
<b>TYPE OF AIR BAG?</b>	<input checked="" type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown
<b>PRIOR SERVICE ON THE AIR BAG SYSTEM?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>DID AIR BAG INFLATE DURING THIS CRASH?</b>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
<b>WAS THIS PERSON WEARING ANY TYPE OF EYE-WEAR (EYE/ SUNGLASSES OR CONTACT LENSES) ANY JEWELRY, OR HAVE ANY OBJECTS IN MOUTH OR HAND?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>WAS THE AIR BAG IN THIS POSITION CONTACTED BY ANOTHER OCCUPANT?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input checked="" type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:


Describe any additional information here:

## National Accident Sampling System-Crashworthiness Data System: Interview Form

## CHILD SAFETY SEAT INFORMATION

WAS THERE A PERSON IN A CHILD SAFETY SEAT IN THIS VEHICLE?

☒ YES (IF "YES" COMPLETE THIS SECTION)☐ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER	OCCUPANT # <u>3</u>	OCCUPANT # <u>    </u>
MAKE AND MODEL OF THE SAFETY SEAT?		 Booster car seat	
TYPE OF SEAT?		<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input checked="" type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown
DIRECTION FACING PRIOR TO THE CRASH?		<input checked="" type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown
VEHICLE'S SEAT BELT USED TO HOLD THE SEAT IN PLACE?		<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
HOW WAS THE VEHICLE'S SEAT BELT SECURED TO THE CHILD SEAT?		<input type="checkbox"/> Looped through designated rear framing studs <input checked="" type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
WHAT WAS THE CHILD SEAT EQUIPPED WITH AT TIME OF PURCHASE?		<input checked="" type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown
ANY OF THESE ADDED AFTER THEY OWNED THE SAFETY SEAT?		<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input checked="" type="checkbox"/> None <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown

Describe any additional information here:



## National Accident Sampling System-Crashworthiness Data System: Interview Form

PAGE 7

## INJURY INFORMATION

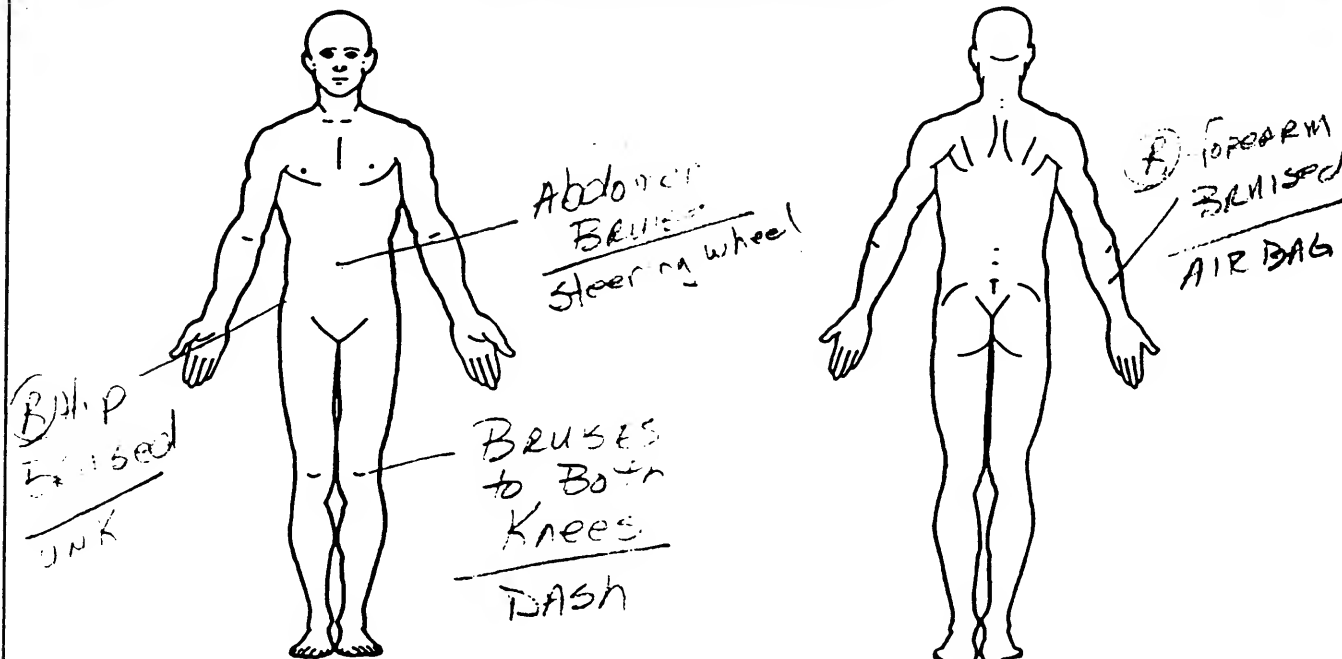
	DRIVER	OCCUPANT # <u>2</u>	OCCUPANT # <u>3</u>
<b>WERE YOU INJURED?</b> ▶ If "YES" go to manikin page and record injuries in detail ▶ If "NO" ask next questions	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>DID YOU HAVE ANY OF THE FOLLOWING:</b> (If any injuries are checked, go to the manikin page and record location, lesion, and source)	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input checked="" type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input checked="" type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input checked="" type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin
<b>TRANSPORTED DIRECTLY FROM ACCIDENT SCENE FOR TREATMENT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown           w/ other DRIVER	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>RECEIVE ANY MEDICAL TREATMENT?</b> (check all that apply)	<input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown
<b>HOSPITALIZED?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown
<b>TREATED AND RELEASED FROM THE EMERGENCY ROOM?</b>	<input checked="" type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>NAME OF MEDICAL TREATMENT FACILITY?</b>	[REDACTED]		
<b>RECEIVE ANY FOLLOW-UP TREATMENT?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: <input type="checkbox"/> Unknown	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: <input type="checkbox"/> Unknown
<b>LOST ANY DAYS FROM WORK OR SCHOOL (COLLEGE) DUE TO THE CRASH?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input checked="" type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days <input type="checkbox"/> Unknown
<b>IF REQUIRED:</b> <b>WILL YOU SIGN A MEDICAL RELEASE?</b> * If not an in-person interview, make appointment to have release signed	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____

PSU Number 10 Case Number—Stratum 9618 Vehicle Number 01 Occupant Number 01

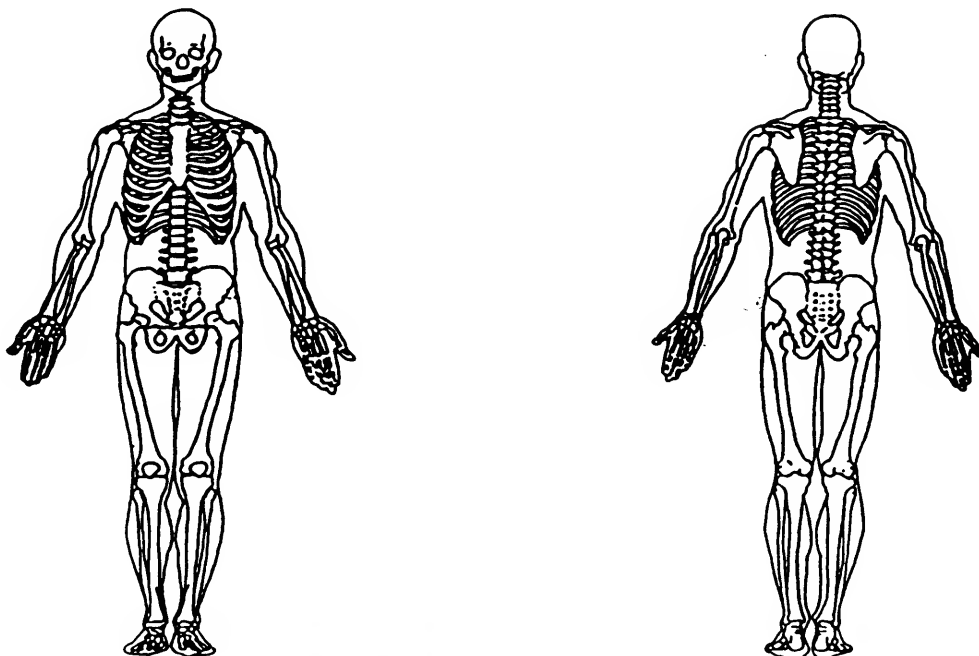
## INJURY DATA FROM INTERVIEWEE(S)

Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): DRIVER

## SOFT TISSUE/INTERNAL INJURIES



## SKELETAL INJURIES



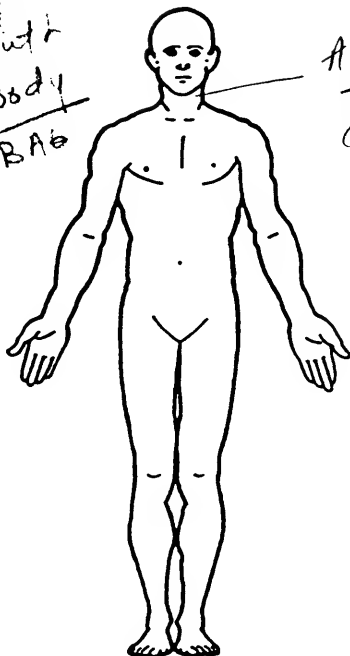
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

## National Accident Sampling System-Crashworthiness Data System: Interview Form

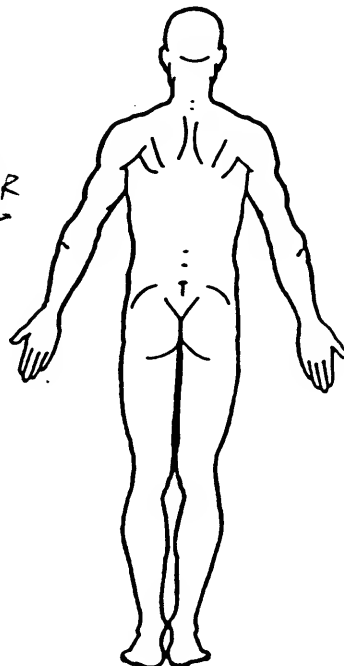
Page 9

PSU Number 10 Case Number—Stratum 9618 Vehicle Number 01 Occupant Number 02

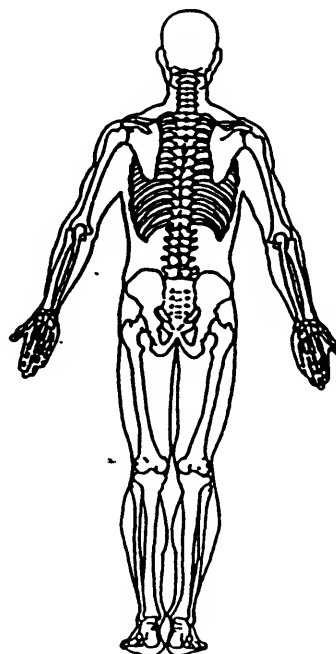
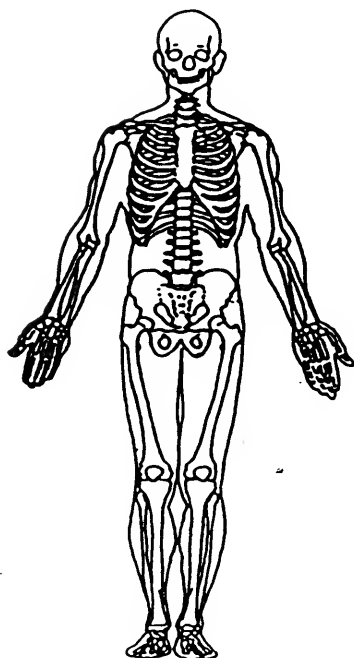
## INJURY DATA FROM INTERVIEWEE(S)

Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): DRIVERNOSE  
mouth  
Bloody  
AIR BAG

## SOFT TISSUE/INTERNAL INJURIES

ABRASIONS  
to NECK -  
completely  
ACROSS IT  
purple in color  
AIR BAG

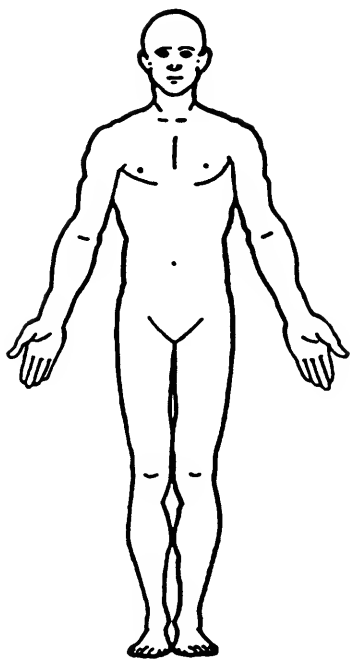
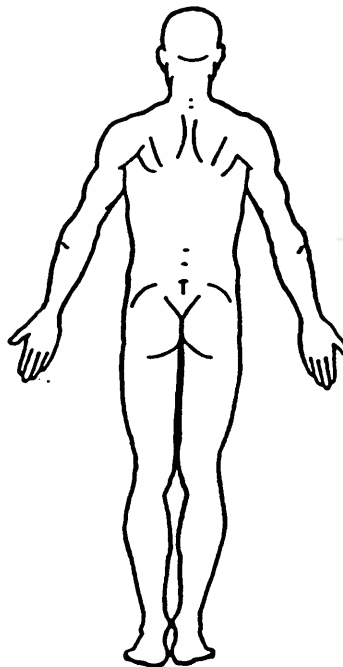
## SKELETAL INJURIES



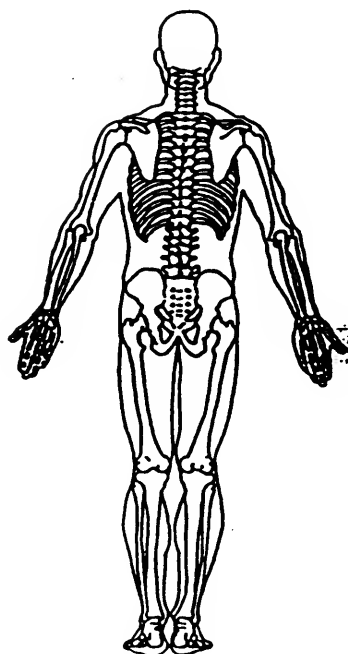
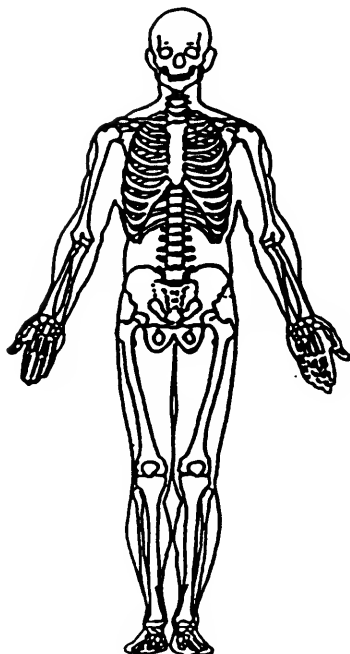
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10 Case Number—Stratum 9618 Vehicle Number 01 Occupant Number 03**INJURY DATA FROM INTERVIEWEE(S)**Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): DRIVER

## SOFT TISSUE/INTERNAL INJURIES

No  
injuries.

## SKELETAL INJURIES



The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).



**NASS CDS INTERVIEW FORM:**  
**VEHICLE #2 DRIVER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## INTERVIEW FORM (A)

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10

Interviewee(s) Role or Name(s): \_\_\_\_\_

2. Case Number - Stratum 9618DRIVER V23. Vehicle Number 02

Phone number: \_\_\_\_\_

Review all available information and interview questions prior to conducting interview(s) to ensure the acquisition of all pertinent data.

If the driver was not the person interviewed, was an appointment made for a follow-up interview?

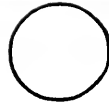
**DRIVER'S DESCRIPTION OF ACCIDENT EVENTS**

I was W/B coming around curve to go north. And it all happened so quick I didn't have time to think I was on Right side of ROAD and there she was. CURVE is bad I don't like it cause you can't see

**OCCUPANT'S DESCRIPTION OF ACCIDENT EVENTS****SPECIFIC QUESTIONS TO ASK INTERVIEWEE**

- Did you happen to notice if/How the 5 yo boy was restrained? I DID not notice
- Did you see the mom pull him out of CAR?  
NO I Didn't

## ACCIDENT DIAGRAM



NORTH

Use this diagram to aid in relating interviewee accident trajectory data (i.e., pre-impact to FRP orientations) to identifiable objects in the environment.

## CRASH DATA INFORMATION

IF POSSIBLE OBTAIN THIS INFORMATION FROM THE DRIVER:

SOURCE OF INFORMATION:	<input checked="" type="checkbox"/> Driver [ ] Other occupant [ ] Relative/friend
TRAVEL DIRECTION?	[ ] North [ ] South [ ] East [ ] West (Or where were they coming from or going to?)
LANE?	<input checked="" type="checkbox"/> 1 [ ] 2 [ ] 3 [ ] 4 [ ] Other Note: lane 1 is the right curb lane
ROAD CONDITION?	<input checked="" type="checkbox"/> Dry [ ] Wet [ ] Snow [ ] Slush [ ] Ice [ ] Sand, dirt, oil [ ] Other (specify)
WEATHER CONDITIONS? (Check all that apply)	<input checked="" type="checkbox"/> No adverse conditions [ ] Rain [ ] Fog [ ] Sleet [ ] Hail [ ] Snow [ ] Other (specify)
SIGN OR SIGNAL PRESENT? (check all that apply)	[ ] Traffic control signal (includes flashing beacons, lane control signals, and green / amber / red signal) [ ] Stop sign [ ] Yield sign [ ] School zone sign [ ] Other regulatory sign (No "U" turn, left turn only, wrong way, etc.) specify: _____ [ ] Warning sign (Winding road sign, stop ahead, intersection signs, etc.) specify: _____ <input checked="" type="checkbox"/> Miscellaneous control (including railroad controls) specify: _____ <input checked="" type="checkbox"/> None [ ] Unknown
WAS THE CONTROL FUNCTIONING PROPERLY?	<input checked="" type="checkbox"/> No traffic control device present [ ] Not functioning properly (includes defaced, badly worn, covered with snow, rotated etc.) specify: _____ [ ] Functioning properly [ ] Unknown
SPEED BEFORE THE IMPACT? (in mph)	[ ] Stopped [ ] 11-20 [ ] 31-40 [ ] 51-60 [ ] 70+ [ ] 1-10 <input checked="" type="checkbox"/> 21-30 <u>25</u> [ ] 41-50 [ ] 61-70 [ ] Unknown
BEFORE IMPACT, INTENDING TO ... ? (check all that apply)	<input checked="" type="checkbox"/> Go straight <input type="checkbox"/> Stopped <input type="checkbox"/> Turn left <input type="checkbox"/> Turn right <input type="checkbox"/> Slow down <input type="checkbox"/> Accelerate <input type="checkbox"/> Back up <input type="checkbox"/> Change lanes to right <input type="checkbox"/> Other (specify): <u>Curve Right.</u> <input type="checkbox"/> Change lanes to left
CONTROL LOSS DUE TO WEATHER OR MECHANICAL PROBLEMS?	<input checked="" type="checkbox"/> No [ ] Unknown [ ] Yes (describe)
AVOIDANCE ACTIONS?	[ ] None [ ] Braking with lock-up [ ] Accelerating [ ] Unknown [ ] Braking without lock-up <input checked="" type="checkbox"/> Steering left [ ] Other- specify: [ ] Releasing brakes [ ] Steering right
LOCATION OF VEHICLE AT TIME OF IMPACT?	<input checked="" type="checkbox"/> Original travel lane [ ] Different travel lane [ ] In intersection [ ] Off roadway to right [ ] Off roadway to left [ ] Other (specify): _____
SPEED AT THE TIME OF IMPACT? (in mph)	[ ] Stopped <input checked="" type="checkbox"/> 11-20 [ ] 31-40 [ ] 51-60 [ ] 70+ [ ] 1-10 <input checked="" type="checkbox"/> 21-30 [ ] 41-50 [ ] 61-70 [ ] Unknown
DESCRIBE ALL THE IMPACTS to the vehicle and how this vehicle moved to its stopped position, after the collision?	<u>only impact</u>



## VEHICLE INFORMATION

## ROLLOVER DATA

DID THIS VEHICLE ROLL OVER DURING THE CRASH?

☐ YES -- ASK THE FOLLOWING QUESTIONS☒ NO -- SKIP TO "FIRE DATA" BELOW  
☐ UNKNOWN -- SKIP TO "FIRE DATA" BELOW

ROLLOVER BEGAN	<input type="checkbox"/> On roadway <input type="checkbox"/> On shoulder <input type="checkbox"/> On roadside or median <input type="checkbox"/> Unknown
ROLLOVER CAUSE?	<input type="checkbox"/> Other vehicle (specify vehicle number) _____ <input type="checkbox"/> Contact to object (specify): _____ <input type="checkbox"/> Other cause (specify): _____ <input type="checkbox"/> Unknown
DIRECTION OF VEHICLE ROLL?	<input type="checkbox"/> Toward the right (passenger side) <input type="checkbox"/> Toward the left (driver side) <input type="checkbox"/> End-over-end <input type="checkbox"/> Unknown
NUMBER OF TURNS	_____ Number of QUARTER TURNS <input type="checkbox"/> Unknown _____ Number of COMPLETE TURNS
PLANE IN CONTACT WITH GROUND AT FINAL REST?	<input type="checkbox"/> Left side <input type="checkbox"/> Top <input type="checkbox"/> Right side <input type="checkbox"/> Wheels <input type="checkbox"/> Unknown

## FIRE DATA

DID THIS VEHICLE EXPERIENCE A FIRE?

☐ YES -- ASK THE FOLLOWING QUESTIONS☒ NO -- SKIP THIS SECTION  
☐ UNKNOWN -- SKIP THIS SECTION

FIRE STARTED, OR SMOKE WAS FIRST SEEN ...	<input type="checkbox"/> Under the hood <input type="checkbox"/> In the trunk/cargo area <input type="checkbox"/> Behind the instrument panel <input type="checkbox"/> Under the vehicle <input type="checkbox"/> In the passenger compartment <input type="checkbox"/> From other involved vehicle <input type="checkbox"/> Unknown
FIRE START WITH THE ELECTRICAL SYSTEM? <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes (specify):
FIRE START WITH THE FUEL SYSTEM? <input type="checkbox"/> No <input type="checkbox"/> Unknown	<input type="checkbox"/> Yes -- specify Which part of the fuel system may have been involved? <input type="checkbox"/> Fuel tank <input type="checkbox"/> Fuel lines <input type="checkbox"/> Engine compartment (specify component if known) <input type="checkbox"/> Unknown

Describe any additional rollover or fire information here:

### ADDITIONAL VEHICLE INFORMATION



<b>YEAR, MAKE AND MODEL?</b>	Year: 19 <u>88</u> Make: <u>Chevrolet</u> Model: <u>Corsica</u>
<b>PREVIOUS OR POST-CRASH DAMAGE?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - describe:  <input type="checkbox"/> Unknown
<b>DOORS OR HATCH OPEN DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> HATCH <input type="checkbox"/> OTHER _____ <input type="checkbox"/> Unknown
<b>WINDOWS BREAK DURING THE CRASH?</b>	<input type="checkbox"/> No                      Check all that apply <input checked="" type="checkbox"/> Yes <input checked="" type="checkbox"/> WS <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> BL <input type="checkbox"/> Roof <input type="checkbox"/> Other <input type="checkbox"/> Unknown                      All others OK
<b>WINDOW PRECRASH STATUS</b>	<input checked="" type="checkbox"/> WS <input type="checkbox"/> LF <input type="checkbox"/> RF <input type="checkbox"/> LR <input type="checkbox"/> RR <input type="checkbox"/> BL <input type="checkbox"/> Roof <input type="checkbox"/> Other  "O" = open                      "C" = Closed "P" = partially open            "U" = Unknown
<b>GLOVE COMPARTMENT DOOR OPEN DURING THE CRASH?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - describe:  <input type="checkbox"/> Unknown
<b>CARGO IN THE VEHICLE?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input checked="" type="checkbox"/> Yes - describe: <u>2 LAWN CHAIRS</u>  Approximate weight - <u>10</u> pounds <u>4.5 + kg</u>
<b>VEHICLE MILEAGE</b>	_____ miles <input type="checkbox"/> Unknown
<b>IF VEHICLE HAS NOT BEEN INSPECTED</b>	Current location of the vehicle: _____ _____ Contact person: _____ _____
Detail any notes, questions to ask interviewee (i.e., rescue personnel damage to vehicle) or directions to vehicle location:	

## SPECIAL CRASH INVESTIGATION ADDENDUM: DRIVER INFORMATION

Do you recall the type of development in the area of the crash?	<input type="checkbox"/> Residential <input type="checkbox"/> Industrial <input checked="" type="checkbox"/> Undeveloped <input type="checkbox"/> Other: _____	<input type="checkbox"/> Commercial <input checked="" type="checkbox"/> Agricultural <input type="checkbox"/> School
What were the weather conditions at the time of the crash?	<input checked="" type="checkbox"/> Clear (no clouds, no precipitation) <input type="checkbox"/> Cloudy (partially cloudy, no precipitation) <input type="checkbox"/> Overcast (full cloud cover, no precipitation) <input type="checkbox"/> Precipitating <input type="checkbox"/> Unknown	
What was the type of precipitation?	<input checked="" type="checkbox"/> No precipitation <input type="checkbox"/> Unknown <input type="checkbox"/> Raining <input type="checkbox"/> Freezing rain <input type="checkbox"/> Sleet <input type="checkbox"/> Snowing <input type="checkbox"/> Hailing	
What was the condition of the road surface?	<input checked="" type="checkbox"/> Dry <input type="checkbox"/> Wet <input type="checkbox"/> Snowy, slushy <input type="checkbox"/> Icy <input type="checkbox"/> Other (e.g., sand, dirt, oil on surface, etc.) <input type="checkbox"/> Unknown	
How would you describe the amount of traffic at the time of the crash?	<input type="checkbox"/> Heavy <input type="checkbox"/> Moderate <input type="checkbox"/> Light <input checked="" type="checkbox"/> No other traffic present	
What is your occupation?	<input type="checkbox"/> Professional <input type="checkbox"/> Technical <input type="checkbox"/> Government official <input type="checkbox"/> Management <input type="checkbox"/> Proprietors <input type="checkbox"/> Sales <input type="checkbox"/> Clerical <input type="checkbox"/> Craftsman and foreman <input type="checkbox"/> Service worker <input type="checkbox"/> Student <input type="checkbox"/> Farmers and farm-managers <input type="checkbox"/> Farm labors and foreman <input type="checkbox"/> Private household worker <input type="checkbox"/> Housewife <input type="checkbox"/> Other: <u>LABORER</u>	
How long have you driven this vehicle?	Years: <u>2</u>	Months: _____
How many miles do you think that you have driven in the last 12-month period?	Miles: <u>22,000</u>	
How often do you drive this particular roadway?	<input checked="" type="checkbox"/> Daily <input type="checkbox"/> Twice weekly <input type="checkbox"/> Once weekly <input type="checkbox"/> Twice monthly <input type="checkbox"/> Once monthly <input type="checkbox"/> Very infrequently <input type="checkbox"/> First time on road <u>not any more</u>	
Where were you coming from just prior to the crash?	<input type="checkbox"/> Home <input checked="" type="checkbox"/> Work <input type="checkbox"/> School <input type="checkbox"/> Shopping <input type="checkbox"/> Social/recreational <input type="checkbox"/> Restaurant <input type="checkbox"/> Personal business <input type="checkbox"/> Other: _____	
Where were you intending to go when the crash occurred?	<input type="checkbox"/> Home <input type="checkbox"/> Work <input type="checkbox"/> School <input type="checkbox"/> Shopping <input type="checkbox"/> Social/recreational <input type="checkbox"/> Restaurant <input type="checkbox"/> Personal business <input checked="" type="checkbox"/> Other: <u>ply son at Brother's</u>	

## OCCUPANT DATA QUESTIONS

HOW MANY PEOPLE WERE IN THE VEHICLE AT THE TIME OF THE CRASH?

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>SEATING POSITION?</b> Front Left (FL)      Second Left (2L) Front Middle (FM)    Second Middle (2M) Front Right (FR)      Second Right (2R)  Third Left (3L)      Other (SPECIFY in block) Third Middle (3M) Third Right (3R)	<b>FRONT LEFT</b>		
<b>SEX, HEIGHT, WEIGHT, AND AGE?</b>  <b>CIRCLE DRIVER'S RACE:</b> <u>White</u> Black    American Indian    160.0 Eskimo or Aleut    Asian or Pacific Islander  Other (specify): Unknown	<input type="checkbox"/> M <input checked="" type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months ____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: <u>5'3"</u> WEIGHT: <u>150</u> AGE: <u>32</u>  DRIVER OF HISPANIC ORIGIN? <input type="checkbox"/> Y <input checked="" type="checkbox"/> N <input type="checkbox"/> U	<input type="checkbox"/> M <input type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months ____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: ____ WEIGHT: ____ AGE: ____  	<input type="checkbox"/> M <input type="checkbox"/> F - Not pregnant <input type="checkbox"/> F - Pregnant - # of months ____ <input type="checkbox"/> F - Unk. if pregnant  HEIGHT: ____ WEIGHT: ____ AGE: ____  
<b>OCCUPANT POSTURE</b>  A) Kneeling or standing on seat B) Lying on or across seat C) Kneeling, standing or sitting in front of seat D) Sitting sideways, turned to side or back E) Sitting on console F) Lying back in reclined position G) Other (specify) H) Unknown	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input checked="" type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above	<input type="checkbox"/> Leaning to left <input type="checkbox"/> Leaning to right <input type="checkbox"/> Sitting upright <input type="checkbox"/> Unknown  Indicate all letters that apply and describe if other than above
<b>FEET AND HANDS/ARMS LOCATION JUST PRIOR TO IMPACT</b>  <b>FEET</b> A) On floor or foot controls B) One or both on dash C) One or both on seat D) Other (specify) E) Unknown  <b>HANDS / ARMS</b> F) Both hands on steering wheel G) One on wheel, other hand resting or adjusting a control (specify hand on wheel and control involved) H) Dialing a cellular phone (specify location and type of phone) I) Holding a cellular phone (specify location and type of phone) J) Bracing with one or both hands K) On lap L) One or both out of window (specify) M) Other (specify) N) Unknown	Indicate all letters that apply and further describe as needed  <div align="center"><u>A</u></div>  <div align="center"><u>F</u></div>	Indicate all letters that apply and further describe as needed	Indicate all letters that apply and further describe as needed

OCCUPANT DATA CONTINUED ON NEXT PAGE



## BACK UP AGAINST THE SEAT BACK?

☒ No (describe)  
☐ Yes  
☐ Unknown

No (describe)  
Yes  
Unknown

( ) No (describe)  
( ) Yes  
( ) Unknown

**ADJUSTABLE SEAT  
TRACK, IF "YES"  
WHERE WAS THE  
TRACK PRIOR TO  
IMPACT?**

☐ Not adjustable  
☒ Seat all the way forward  
☐ Between forward and middle  
☐ At middle position  
☐ Between middle and rear position  
☐ Seat all the way rearward  
☐ Unknown

- ☐ Not adjustable
- ☐ Seat all the way forward
- ☐ Between forward and middle
- ☐ At middle position
- ☐ Between middle and rear position
- ☐ Seat all the way rearward
- ☐ Unknown

- ☐ Not adjustable
- ☐ Seat all the way forward
- ☐ Between forward and middle
- ☐ At middle position
- ☐ Between middle and rear position
- ☐ Seat all the way rearward
- ☐ Unknown

**ADJUSTABLE SEAT  
BACK, IF "YES"  
WHERE WAS THE  
BACK PRE AND  
POST IMPACT**

PRE	POST
<input type="checkbox"/>	<input type="checkbox"/> Not adjustable
<input checked="" type="checkbox"/>	<input type="checkbox"/> Completely upright
<input type="checkbox"/>	<input type="checkbox"/> Slightly reclined
<input type="checkbox"/>	<input type="checkbox"/> Completely reclined
	<input type="checkbox"/> Slightly forward of upright
	<input type="checkbox"/> Completely forward
<input type="checkbox"/>	<input type="checkbox"/> Unknown

PRE	POST
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> Not adjustable
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> Completely upright
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> Slightly reclined
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> Completely reclined
	<input type="checkbox"/> <input type="checkbox"/> Slightly forward of upright
	<input type="checkbox"/> <input type="checkbox"/> Completely forward
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> Unknown

PRE	POST
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> Not adjustable
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> Completely upright
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> Slightly reclined
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> Completely reclined
	<input type="checkbox"/> <input type="checkbox"/> Slightly forward of upright
	<input type="checkbox"/> <input type="checkbox"/> Completely forward
<input type="checkbox"/> <input type="checkbox"/>	<input type="checkbox"/> <input type="checkbox"/> Unknown

### TILT STEERING COLUMN ADJUSTMENT PRIOR TO IMPACT

☒ Not adjustable    ☐ Full up    ☐ Between full up and center  
☐ Center    ☐ Between center and full down  
☐ Full down    ☐ Unknown

**TELESCOPING STEERING  
COLUMN PRIOR TO IMPACT**

☒ Not adjustable    ☐ Full back    ☐ Between full back and midpoint  
☐ Midpoint    ☐ Between midpoint and full forward  
☐ Full forward    ☐ Unknown

**Did this vehicle have a cellular phone in it during the crash?**

☒ No  
☐ Yes - describe type: \_\_\_\_\_  
 (e.g., portable, mounted in vehicle, flip phone, etc.)

☐ Unknown

***(Note to researcher: try to determine any driver distractions without implying fault)***

**Was the driver doing any of the following? (check all that apply - and specify)**

- [ ] Talking to or listening to another occupant (specify):
- [ ] Was there a moving object in vehicle (specify):
- [ ] Talking or listening on a cellular phone (specify):
- [ ] Dialing a cellular phone (specify):
- [ ] Adjusting climate control (specify):
- [ ] Adjusting radio, CD or cassette player (specify):
- [ ] Using other device or object in vehicle (specify):
- [ ] Sleepy / asleep (specify):
- [ ] Distracted by outside person, object, or event (specify):
- [ ] Eating or drinking (specify):
- [ ] Smoking related (specify):
- [ ] Other (specify):
- [ ] Unknown

## RESTRAINT INFORMATION

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>TYPE OF SEAT BELT AVAILABLE</b>  NOTE: If a belt is not available for a seat position -- describe reason	<input type="checkbox"/> Unknown- <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:	<input type="checkbox"/> Unknown <input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Not available * * Describe:
<b>DO BELTS MOVE ALONG A MOTORIZED TRACK FOR THIS SEAT?</b> (i.e., 2-point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
<b>IF "YES", WERE THEY WORKING PROPERLY?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)	<input type="checkbox"/> Yes <input type="checkbox"/> No (describe)
<b>ARE ANY BELTS ATTACHED TO THE DOOR?</b> (i.e., 3-point automatic belt)	<input type="checkbox"/> Unknown <input checked="" type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *	<input type="checkbox"/> Unknown <input type="checkbox"/> No <input type="checkbox"/> Yes *
<b>* IF "YES", DOES IT CROSS:</b>	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both	<input type="checkbox"/> Chest <input type="checkbox"/> Lap <input type="checkbox"/> Both
<b>OCCUPANT WEARING ANY SEATBELT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>SKIP THE FOLLOWING IF NO SEAT BELT WAS WORN</b>			
<b>TYPE OF BELT WORN?</b>	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input checked="" type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown	<input type="checkbox"/> Lap belt <input type="checkbox"/> Shoulder belt <input type="checkbox"/> Lap & Shoulder <input type="checkbox"/> Unknown
<b>LAP BELT SITUATED?</b>	<input checked="" type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Low on lap <input type="checkbox"/> Across stomach <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
<b>SHOULDER BELT SITUATED?</b>	<input checked="" type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Over shoulder <input type="checkbox"/> Under the arm <input type="checkbox"/> Behind back <input type="checkbox"/> Behind seat <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
Describe any breaks, tears, or failures to any of the seat belts:			

## EJECTION, ENTRAPMENT, MOBILITY INFORMATION

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
ANY PART OF BODY THROWN OUTSIDE THE VEHICLE DURING THE CRASH?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.	<input type="checkbox"/> No <input type="checkbox"/> Yes * <input type="checkbox"/> Unknown  * If "Yes" - what part(s) were ejected, and what area of the vehicle was involved.
ANYONE PINNED IN THE VEHICLE?	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment	<input type="checkbox"/> No <input type="checkbox"/> Yes ___ physically pinned ___ jammed doors ___ fire, etc. <input type="checkbox"/> Unknown  Detail any entrapment
HOW DID OCCUPANT(S) EXIT THE VEHICLE?	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input checked="" type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown	<input type="checkbox"/> Fatal before removed <input type="checkbox"/> Removed while unconscious, or not oriented to time or place <input type="checkbox"/> Removed due to perceived serious injuries <input type="checkbox"/> Exited with some assistance <input type="checkbox"/> Exited under own power <input type="checkbox"/> Fully ejected <input type="checkbox"/> Unknown

Further describe any ejection, entrapment, or mobility information here:

**AIR BAG INFORMATION**

WAS THIS VEHICLE EVER EQUIPPED WITH AN AIR BAG?

☐ YES (IF "YES" COMPLETE THIS SECTION)☒ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER SIDE FRONTAL	PASSENGER SIDE FRONTAL OCCUPANT # ____	"OTHER" AIR BAG SPECIFY: _____ OCCUPANT # ____
<b>VEHICLE BEEN IN ANY PREVIOUS CRASHES?</b>  <input type="checkbox"/> NO <input type="checkbox"/> YES - continue to right <input type="checkbox"/> UNKNOWN - go to box below	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED	<input type="checkbox"/> Prior crash <u>without</u> deployment <input type="checkbox"/> One prior crash <u>with</u> deployment <input type="checkbox"/> > 1, <u>with</u> at least one deployment <input type="checkbox"/> Previous accident(s) unknown if deployed  <u>IF PRIOR DEPLOYMENT</u> <input type="checkbox"/> CHECK IF <u>NOT</u> REINSTALLED
<b>TYPE OF AIR BAG?</b>	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown	<input type="checkbox"/> Original equipment <input type="checkbox"/> Retrofitted <input type="checkbox"/> Replacement <input type="checkbox"/> Unknown
<b>PRIOR SERVICE ON THE AIR BAG SYSTEM?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>DID AIR BAG INFLATE DURING THIS CRASH?</b>	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk	<input type="checkbox"/> Yes <input type="checkbox"/> Unknown <input type="checkbox"/> No  If "NO" was the wiring disconnected prior to the crash?  <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Unk
<b>WAS THIS PERSON WEARING ANY TYPE OF EYE-WEAR (EYE/ SUNGLASSES OR CONTACT LENSES) ANY JEWELRY, OR HAVE ANY OBJECTS IN MOUTH OR HAND?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:
<b>WAS THE AIR BAG IN THIS POSITION CONTACTED BY ANOTHER OCCUPANT?</b>	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:	<input type="checkbox"/> No <input type="checkbox"/> Unknown <input type="checkbox"/> Yes - Specify:

Describe any additional information here:



**CHILD SAFETY SEAT INFORMATION****WAS THERE A PERSON IN A CHILD SAFETY SEAT IN THIS VEHICLE?**☐ YES (IF "YES" COMPLETE THIS SECTION)☒ NO ☐ UNKNOWN (IF "NO" OR "UNKNOWN" SKIP THIS SECTION)

	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>MAKE AND MODEL OF THE SAFETY SEAT?</b>			
<b>TYPE OF SEAT?</b>		<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Infant <input type="checkbox"/> Toddler <input type="checkbox"/> Convertible <input type="checkbox"/> Booster <input type="checkbox"/> Integral <input type="checkbox"/> Other Specify: _____ <input type="checkbox"/> Unknown
<b>DIRECTION FACING PRIOR TO THE CRASH?</b>		<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown	<input type="checkbox"/> Front <input type="checkbox"/> Rearward <input type="checkbox"/> Unknown
<b>VEHICLE'S SEAT BELT USED TO HOLD THE SEAT IN PLACE?</b>		<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>HOW WAS THE VEHICLE'S SEAT BELT SECURED TO THE CHILD SEAT?</b>		<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> Looped through designated rear framing studs <input type="checkbox"/> Looped through arm rest slots <input type="checkbox"/> Belt across safety shield <input type="checkbox"/> Looped through rear frame outside the designated framing struts <input type="checkbox"/> Other (specify): _____ <input type="checkbox"/> Unknown
<b>WHAT WAS THE CHILD SEAT EQUIPPED WITH AT TIME OF PURCHASE?</b>		<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> Unknown
<b>ANY OF THESE ADDED AFTER THEY OWNED THE SAFETY SEAT?</b>		<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown	<input type="checkbox"/> Harness <input type="checkbox"/> Shield <input type="checkbox"/> Tether <input type="checkbox"/> None <input type="checkbox"/> Unknown

Describe any additional information here:

## INJURY INFORMATION

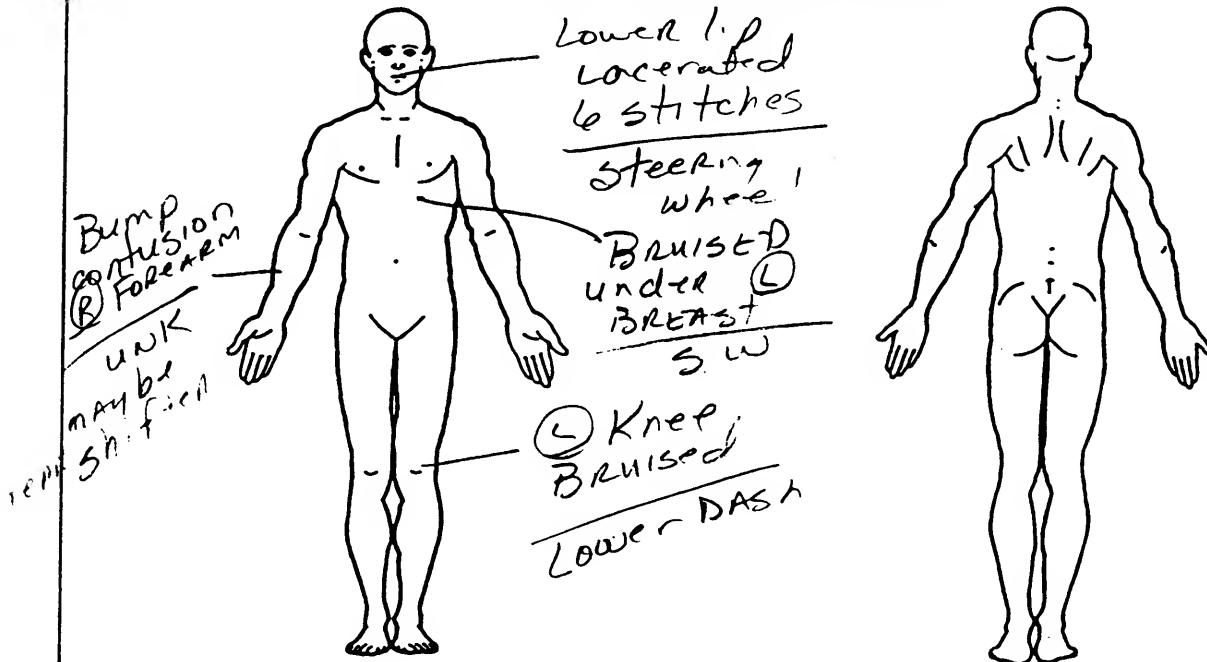
	DRIVER	OCCUPANT # ____	OCCUPANT # ____
<b>WERE YOU INJURED?</b> <p>► If "YES" go to manikin page and record injuries in detail</p> <p>► If "NO" ask next questions</p>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>DID YOU HAVE ANY OF THE FOLLOWING:</b> <p>(If any injuries are checked, go to the manikin page and record location, lesion, and source)</p>	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin	<input type="checkbox"/> Cuts <input type="checkbox"/> Abrasions <input type="checkbox"/> Bruises <input type="checkbox"/> Broken bones <input type="checkbox"/> Head, skull, brain <input type="checkbox"/> Internal injury <input type="checkbox"/> Sprains, strains <input type="checkbox"/> Other - specify on manikin
<b>TRANSPORTED DIRECTLY FROM ACCIDENT SCENE FOR TREATMENT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>RECEIVE ANY MEDICAL TREATMENT?</b> <p>(check all that apply)</p>	<input checked="" type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown	<input type="checkbox"/> Hospital <input type="checkbox"/> Medical clinic <input type="checkbox"/> Paramedics at scene <input type="checkbox"/> Doctor's office <input type="checkbox"/> Treated by self <input type="checkbox"/> Unknown
<b>HOSPITALIZED?</b>	<input checked="" type="checkbox"/> No <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown
<b>TREATED AND RELEASED FROM THE EMERGENCY ROOM?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes <input type="checkbox"/> Unknown
<b>NAME OF MEDICAL TREATMENT FACILITY?</b>	<div style="background-color: black; width: 100px; height: 1.2em; display: inline-block;"></div> HOSP		
<b>RECEIVE ANY FOLLOW-UP TREATMENT?</b>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Yes - describe any additional injuries diagnosed: _____ <input type="checkbox"/> Unknown
<b>LOST ANY DAYS FROM WORK OR SCHOOL (COLLEGE) DUE TO THE CRASH?</b>	<input type="checkbox"/> No 106 Hrs <input type="checkbox"/> Not working prior to crash <input checked="" type="checkbox"/> Yes - # of days 11 And count <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown	<input type="checkbox"/> No <input type="checkbox"/> Not working prior to crash <input type="checkbox"/> Yes - # of days _____ <input type="checkbox"/> Unknown
<b>IF REQUIRED:</b> <b>WILL YOU SIGN A MEDICAL RELEASE?</b> <p>* If not an in-person interview, make appointment to have release signed</p>	<input type="checkbox"/> No <input checked="" type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____	<input type="checkbox"/> No <input type="checkbox"/> Yes* <input type="checkbox"/> Unknown DATE: _____ TIME: _____ PLACE: _____

PSU Number 10 Case Number-Stratum 9618 Vehicle Number 02 Occupant Number 01

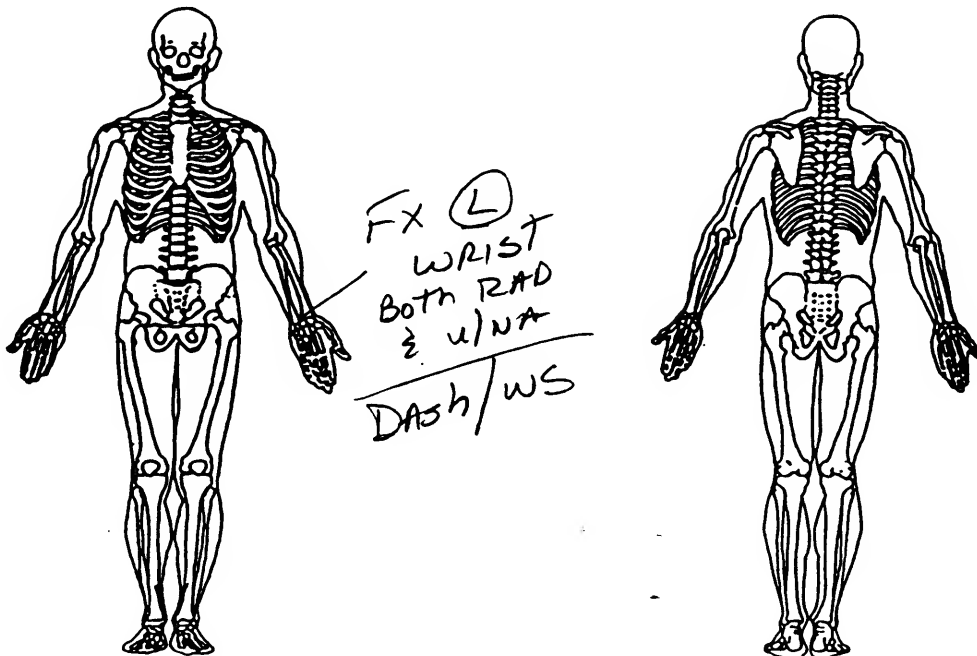
## INJURY DATA FROM INTERVIEWEE(S)

Indicate the Location, Lesion, Detail, and Source of all injuries. Specify interviewee(s): \_\_\_\_\_

## SOFT TISSUE/INTERNAL INJURIES



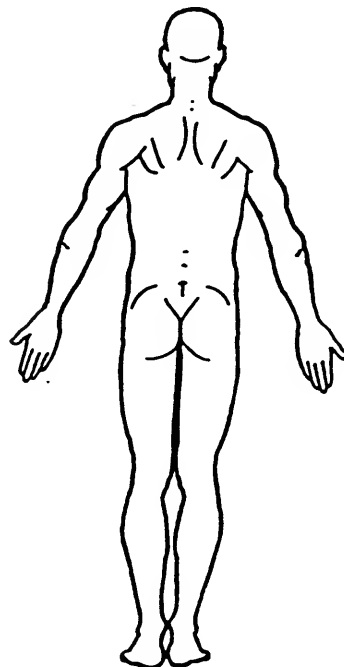
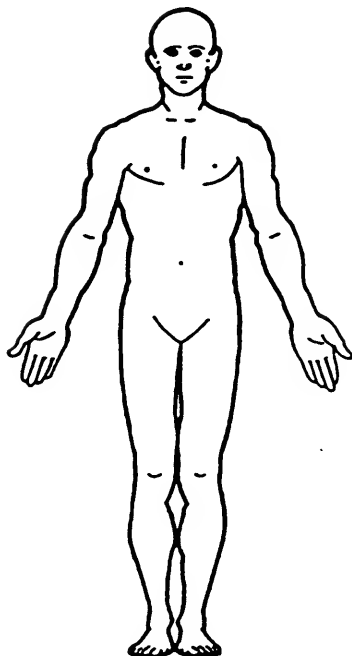
## SKELETAL INJURIES



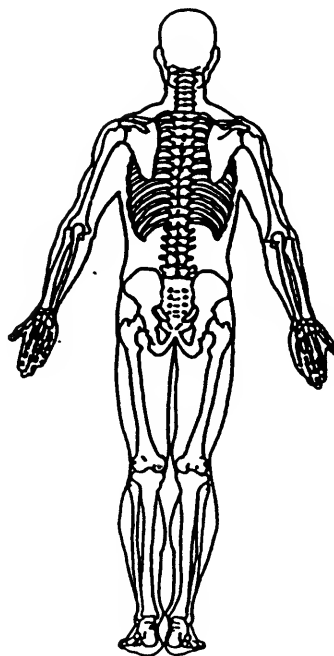
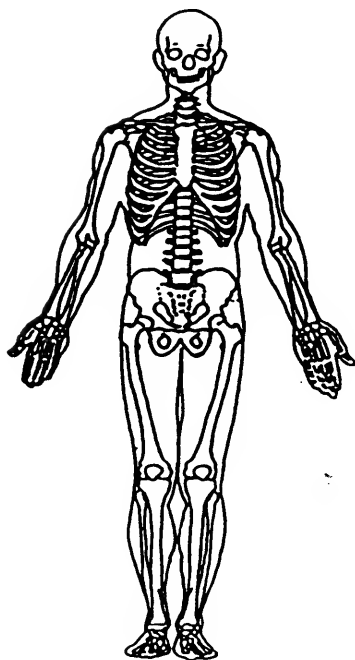
The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

PSU Number 10 Case Number—Stratum 96 Vehicle Number \_\_\_\_\_ Occupant Number \_\_\_\_\_**INJURY DATA FROM INTERVIEWEE(S)**Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): \_\_\_\_\_

## SOFT TISSUE/INTERNAL INJURIES

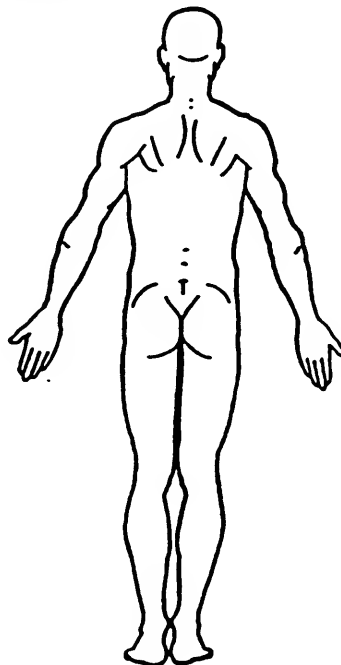
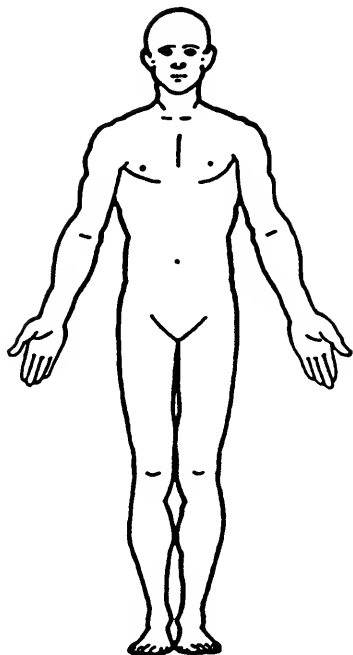
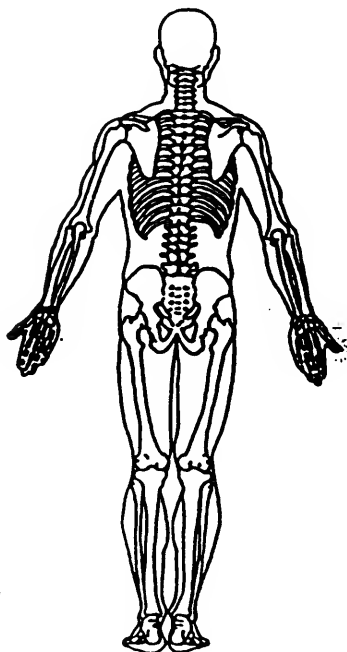
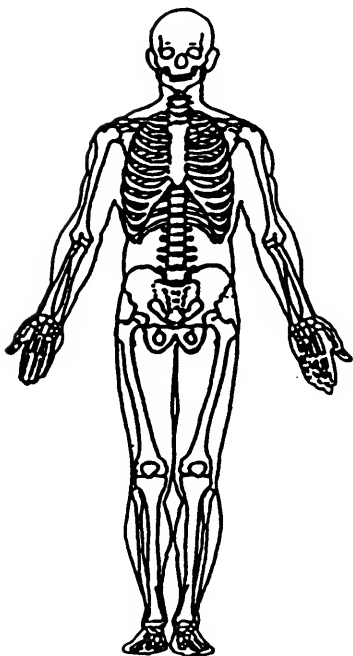


## SKELETAL INJURIES



The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).



PSU Number 10 Case Number—Stratum 96 Vehicle Number \_\_\_\_\_ Occupant Number \_\_\_\_\_**INJURY DATA FROM INTERVIEWEE(S)**Indicate the *Location, Lesion, Detail, and Source* of all injuries. Specify interviewee(s): \_\_\_\_\_**SOFT TISSUE/INTERNAL INJURIES****SKELETAL INJURIES**

The space provided on the back of this page may be used to further detail injuries noted by the interviewee(s).

**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**CASE VEHICLE DRIVER**



# OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number 10  
2. Case Number - Stratum 9618  
3. Vehicle Number 01  
4. Occupant Number 01

## OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 27  
Code actual age at time of accident.  
(00) Less than one year old (specify by month):  
(97) 97 years and older  
(99) Unknown
6. Occupant's Sex 2  
(1) Male  
(2) Female-not reported pregnant  
(3) Female-pregnant-1st trimester(1st-3rd month)  
(4) Female-pregnant-2nd trimester(4th-6th month)  
(5) Female-pregnant-3rd trimester(7th-9th month)  
(6) Female-pregnant-term unknown  
(9) Unknown
7. Occupant's Height 160  
Code actual height to the nearest centimeter.  
(999) Unknown  
63 inches X 2.54 = 160 centimeters
8. Occupant's Weight 086  
Code actual weight to the nearest kilogram.  
(999) Unknown  
190 pounds X .4536 = 86.2 kilograms
9. Occupant's Role 1  
(1) Driver  
(2) Passenger  
(9) Unknown

## OCCUPANT'S SEATING

10. Occupant's Seat Position 11  
*Front Seat*  
(11) Left side  
(12) Middle  
(13) Right side  
(14) Other (specify):  
(15) On or in the lap of another occupant
- Second Seat*  
(21) Left side  
(22) Middle  
(23) Right side  
(24) Other (specify):  
(25) On or in the lap of another occupant
- Third Seat*  
(31) Left side  
(32) Middle  
(33) Right side  
(34) Other (specify):  
(35) On or in the lap of another occupant
- Fourth Seat*  
(41) Left side  
(42) Middle  
(43) Right side  
(44) Other (specify):  
(45) On or in the lap of another occupant
- (97) In or on unenclosed area  
(98) Other seat (specify):  
(99) Unknown
11. Occupant's Posture 0  
(0) Normal posture
- Abnormal posture*  
(1) Kneeling or standing on seat  
(2) Lying on or across seat  
(3) Kneeling, standing or sitting in front of seat  
(4) Sitting sideways or turned to talk with another occupant or to look out a rear window  
(5) Sitting on a console  
(6) Lying back in a reclined seat position  
(7) Bracing with feet or hands on a surface in front of seat  
(8) Other abnormal posture (specify):  
(9) Unknown

**EJECTION/ENTRAPMENT****12. Ejection**

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0**13. Ejection Area**

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0**14. Ejection Medium**

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_

0

- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_

(9) Unknown

**15. Medium Status (Immediately Prior To Impact)**

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0**16. Entrapment**

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

0**17. Occupant Mobility**

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown

3



## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 0 0

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

(02) Shoulder belt

(03) Lap belt

(04) Lap and shoulder belt

(05) Belt used—type unknown

(08) Other belt used (specify):

(12) Shoulder belt used with child safety seat

(13) Lap belt used with child safety seat

(14) Lap and shoulder belt used with child safety seat

(15) Belt used with child safety seat—type unknown

(18) Other belt used with child safety seat (specify):

(99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 4

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):

(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

(6) Broken retractor

(7) Combination of above (specify):

(8) Other automatic belt failure (specify):

(9) Unknown

POLICE REPORTED RESTRAINT USE	AIR BAG SYSTEM FUNCTION
<p>28. Police Reported Belt Use <u>4</u></p> <p>(0) None used</p> <p>(1) Police did not indicate belt use</p> <p>(2) Shoulder belt</p> <p>(3) Lap belt</p> <p>(4) Lap and shoulder belt</p> <p>(5) Belt used, type not specified</p> <p>(6) Child safety seat</p> <p>(7) Automatic belt</p> <p>(8) Other type belt, (specify):</p> <p>(9) Police indicated "unknown"</p>	<p>30. Frontal Air Bag System Availability/Function <u>1</u></p> <p>(This Occupant Position)</p> <p>(0) Not equipped/not available</p> <p>(1) Air bag</p> <p><i>Non-functional</i></p> <p>(2) Air bag disconnected (specify):</p> <p>(3) Air bag not reinstalled</p> <p>(9) Unknown</p>
<p>29. Police Reported Air Bag Availability/Function <u>1</u></p> <p>(0) No air bag available</p> <p>(1) Police did not indicate air bag availability/function</p> <p>(2) Deployed</p> <p>(3) Not deployed</p> <p>(4) Unknown if deployed</p> <p>(9) Police indicated "unknown"</p>	<p>31. Frontal Air Bag System Deployment <u>1</u></p> <p>(This Occupant Position)</p> <p>(0) Not equipped/not available</p> <p>(1) Deployed during accident (as a result of impact)</p> <p>(2) Deployed inadvertently just prior to accident</p> <p>(3) Deployed, details unknown</p> <p>(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)</p> <p>(5) Unknown if deployed</p> <p>(7) Nondeployed</p> <p>(9) Unknown</p>
<p>Check the Primary Source Used In Determining Belt Use.</p> <p><input checked="" type="checkbox"/> Vehicle inspection</p> <p><input type="checkbox"/> Official injury data</p> <p><input type="checkbox"/> Driver/occupant interview</p> <p><input type="checkbox"/> Other (specify):</p> <p><input type="checkbox"/> Unknown if belt used</p>	<p>32. Other Than First Seat Frontal Air Bag Availability/Function <u>0</u></p> <p>(This Occupant Position)</p> <p>(0) Not equipped/not available</p> <p>(1) Air bag</p> <p><i>Non-functional</i></p> <p>(2) Air bag disconnected (specify):</p> <p>(3) Air bag not reinstalled</p> <p>(9) Unknown</p> <p><i>Specify type of "other" air bag present:</i></p>
	<p>33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) <u>0</u></p> <p>(0) Not equipped with an "other" air bag</p> <p>(1) Deployed during accident (as a result of impact)</p> <p>(2) Deployed inadvertently just prior to accident</p> <p>(3) Deployed, details unknown</p> <p>(4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)</p> <p>(5) Unknown if deployed</p> <p>(7) Nondeployed</p> <p>(9) Unknown</p>
	<p>34. Are There Indications of Air Bag System Failure? <u>1</u></p> <p>(This Occupant Position)</p> <p>(0) Not equipped/not available</p> <p>(1) No</p> <p>(2) Yes (specify):</p> <p>(9) Unknown</p>

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify): \_\_\_\_\_

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

- (00) Not equipped/not available  
\_\_\_\_\_ Code the accident event sequence number that initiated the air bag deployment

- (96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify): \_\_\_\_\_

- (6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 018

- (\_000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(\_996) Deployment, unknown longitudinal Delta V  
(\_997) Not deployed  
(\_998) Unknown if deployed  
(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 1

- (0) Not equipped/not available  
(1) No cover flap didn't completely open  
(2) Yes opened correctly  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 1

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 01

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify): \_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 01  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 (03) Object carried by occupant, (specify):  
 (04) Adaptive/assistive controls, (specify):  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (88) Other damage source (specify):  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 2  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 1  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 1  
 (0) Not air bag equipped/air bag not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 (9) Unknown
50. Seat Type (this Occupant Position) 06  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 2  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track**  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

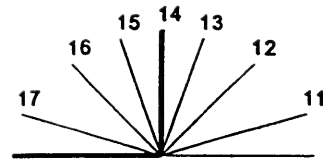


**HEAD RESTRAINT AND SEAT EVALUATION** *continued*53. Seat Back Incline Prior and Post Impact 14

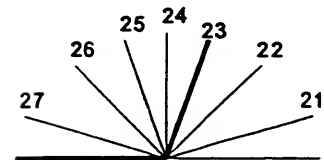
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

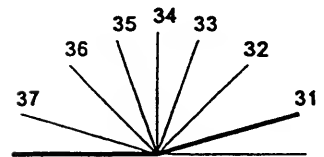
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 0 0 0

(000) No child safety seat

Applicable codes are found in your NASS CDS

Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 0 0

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0 059. Child Safety Seat Shield Usage 0 060. Child Safety Seat Tether Usage 0 0

Note: Options below applicable to Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market harness/shield/tether added

(09) Unknown if harness/shield/tether added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 2

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

64. Hospital Stay 00

- (00) Not Hospitalized
- \_\_\_\_\_ Code the number of days (up through 60) that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 97

- \_\_\_\_\_ Code the number of days (up through 60) that the occupant lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**66. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death 0068. 2nd Medically Reported Cause of Death 0069. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 06

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

71. Glasgow Coma Scale (GCS) Score 15  
(at Medical Facility)

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood? 1

- (1) No - blood not given  
(2) Yes - blood given  
(specify units):  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 01

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 1

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used



**NASS CDS OCCUPANT INJURY FORM:**  
**CASE VEHICLE DRIVER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number		10		3. Vehicle Number		01	
2. Case Number - Stratum		9618		4. Occupant Number		01	

INJURY DATA											
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.											
A.I.S. - 90											
Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
Contusion posterior scalp	1st 5.	6.	7.	8.	9.	10.	11.	12.	13.	14.	15.
Contusion Abdomen	2nd 16.	17.	18.	19.	20.	21.	22.	23.	24.	25.	26.
Contusion forearm	3rd 27.	28.	29.	30.	31.	32.	33.	34.	35.	36.	37.
Contusion Hip	4th 38.	39.	40.	41.	42.	43.	44.	45.	46.	47.	48.
Contusion Knee	5th 49.	50.	51.	52.	53.	54.	55.	56.	57.	58.	59.
Contusion Knee	6th 60.	61.	62.	63.	64.	65.	66.	67.	68.	69.	70.
7th	71.	72.	73.	74.	75.	76.	77.	78.	79.	80.	81.
8th	82.	83.	84.	85.	86.	87.	88.	89.	90.	91.	92.
9th	93.	94.	95.	96.	97.	98.	99.	100.	101.	102.	103.
10th	104.	105.	106.	107.	108.	109.	110.	111.	112.	113.	114.

OCCUPANT INJURY DATA											
Source of Injury Data	A.I.S. - 90						Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect					
11th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
12th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
13th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
14th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
15th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
16th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
17th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
18th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
19th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
20th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
21st	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
22nd	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
23rd	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
24th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —
25th	—	—	—	— — —	— — —	—	—	— — — —	—	—	— — —

[illegible]

**OCCUPANT INJURY CLASSIFICATION**

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(5) Anterior
(6) Spine	The exceptions to this rule apply to:		(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
Type of Anatomic Structure	Whole Area	Abbreviated Injury Scale	
(1) Whole Area	(02) Skin - Abrasion	(1) Minor Injury	
(2) Vessels	(04) Skin - Contusion	(2) Moderate Injury	
(3) Nerves	(06) Skin - Laceration	(3) Serious Injury	
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion	(4) Severe Injury	
(5) Skeletal (includes joints)	(10) Amputation	(5) Critical Injury	
(6) Head - LOC	(20) Burn	(6) Maximum (untreatable)	
(9) Skin	(30) Crush	(7) Injured, unknown severity	
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

**SOURCE OF INJURY DATA****INJURY SOURCE  
CONFIDENCE LEVEL****DIRECT/INDIRECT INJURY****OFFICIAL RECORDS**

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

**UNOFFICIAL RECORDS**

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Air Bag Deployed Unrestrained driver in head-on collision (ED)  
(ED)

Restrained?

☒ No (ED, EN, ET)

☐ Yes

Blood Alcohol Level  
(mg/dl)

BAL = \_\_\_\_

Glasgow Coma  
Scale Score

GCSS = 15  
(ED)

Units of Blood  
Given

Units = \_\_\_\_

Arterial Blood Gases

pH = \_\_\_\_

PO<sub>2</sub> = \_\_\_\_

PCO<sub>2</sub> = \_\_\_\_

HCO<sub>3</sub> = \_\_\_\_

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Hx: of anxiety attacks (EN)

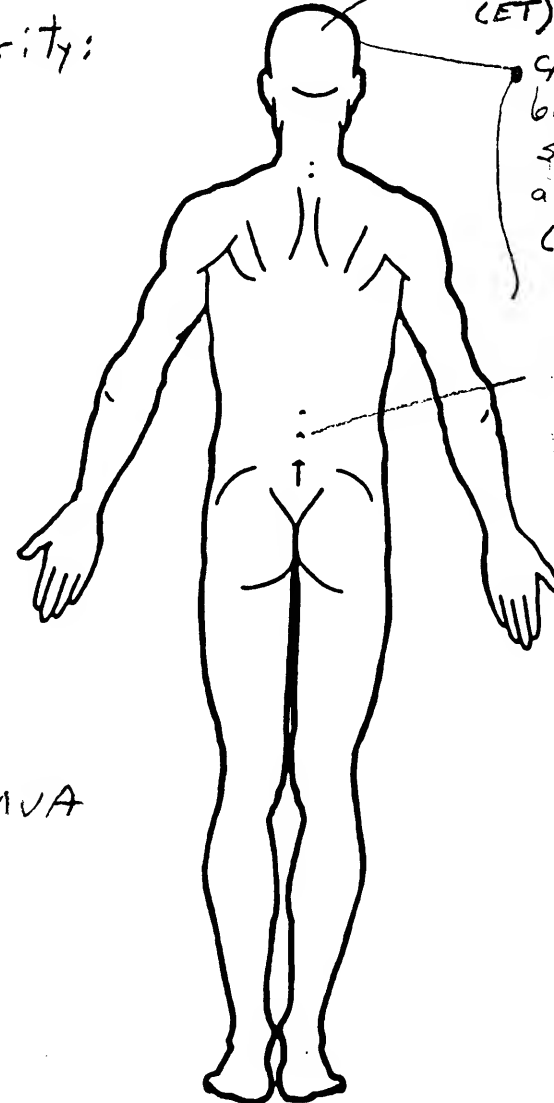
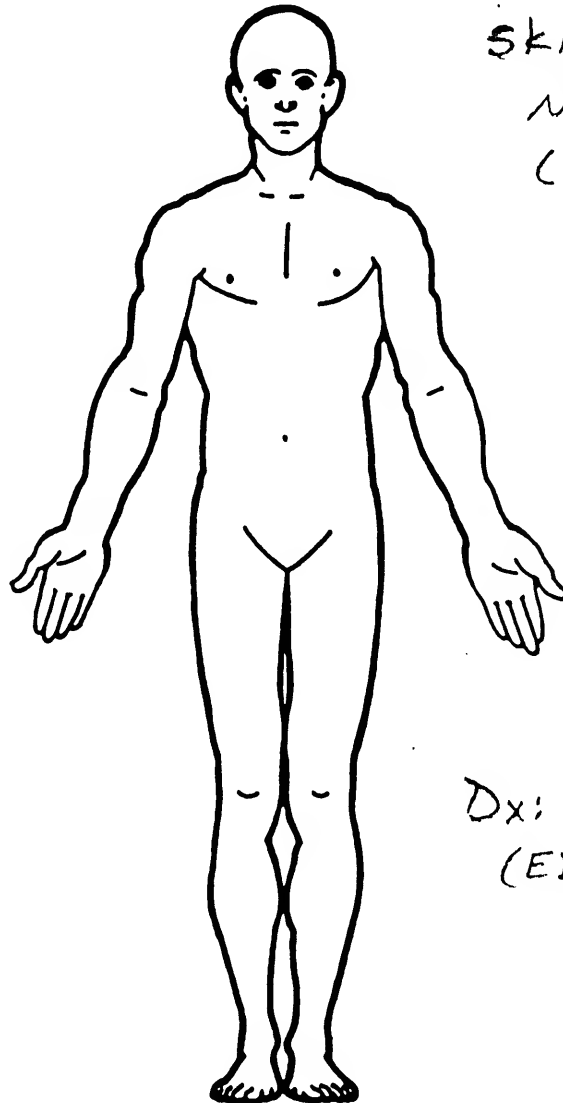
Hematoma occipital  
(ET)

c/o pain to  
back + (R)  
side of head  
and (R) arm  
(EN, ET)

c/o low back  
pain  
(ED)

Skin Integrity:  
N/A  
(EN)

Dx: S/P MVA  
(ED)

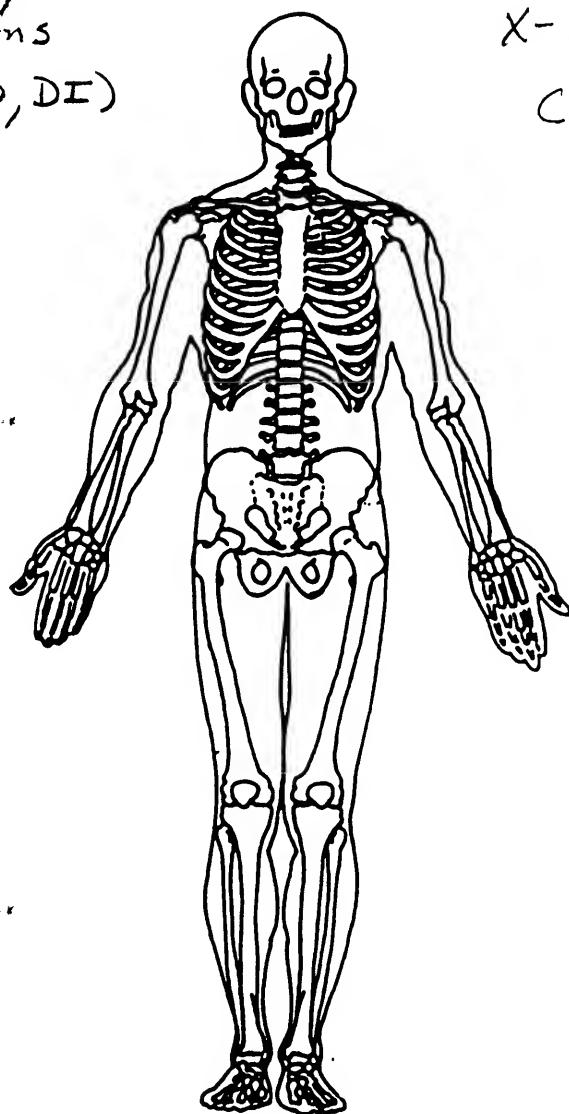




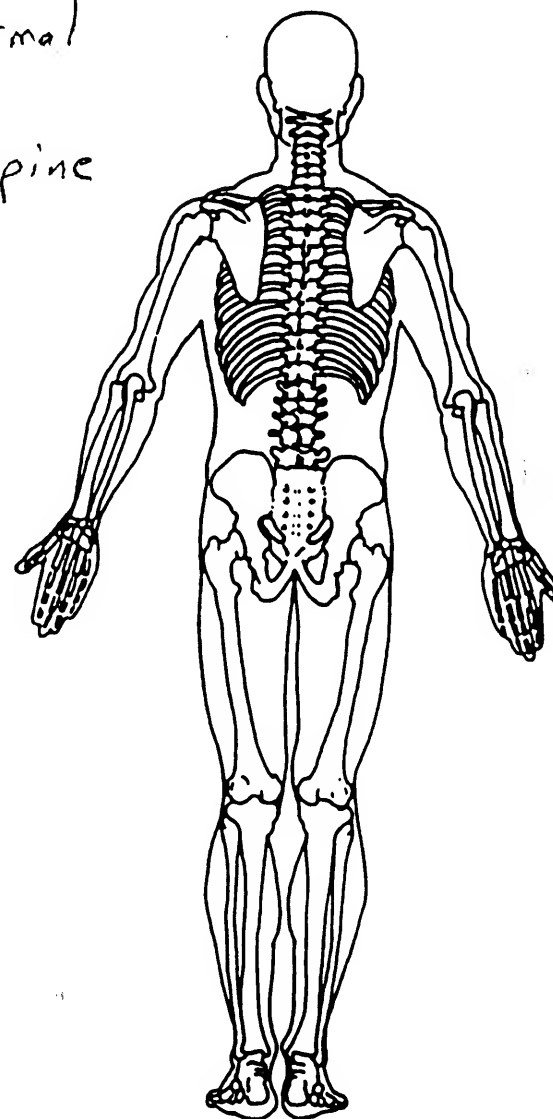
## OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

• Head injury  
instructions  
given (ED, DI)



X-ray: Normal  
C-spine +  
lumbar spine  
(EX)



## INJURY SOURCES

- FRONT**
- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_
- LEFT SIDE**
- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (055) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_
- RIGHT SIDE**
- (101) Right side interior surface, excluding hardware or armrests
- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_
- INTERIOR**
- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): Center Armrest
- AIR BAG**
- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry
- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): \_\_\_\_\_
- (195) Other air bag compartment cover (specify): \_\_\_\_\_
- ROOF**
- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top
- FLOOR**
- (251) Floor (including toe pan)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake
- REAR**
- (301) Beclight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_
- ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT**
- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts. (specify): \_\_\_\_\_
- (409) Additional or relocated switches. (specify): \_\_\_\_\_
- (410) Raised roof
- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_
- EXTERIOR of OCCUPANT'S VEHICLE**
- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects
- EXTERIOR OF OTHER MOTOR VEHICLE**
- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle
- OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT**
- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object
- NONCONTACT INJURY**
- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

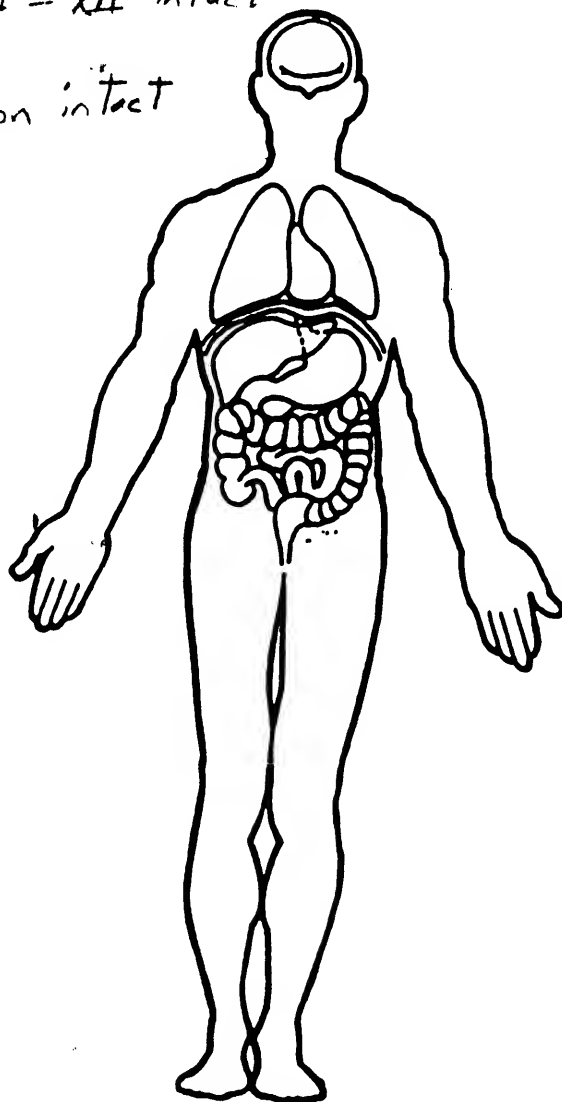
## OFFICIAL INJURY DATA — INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

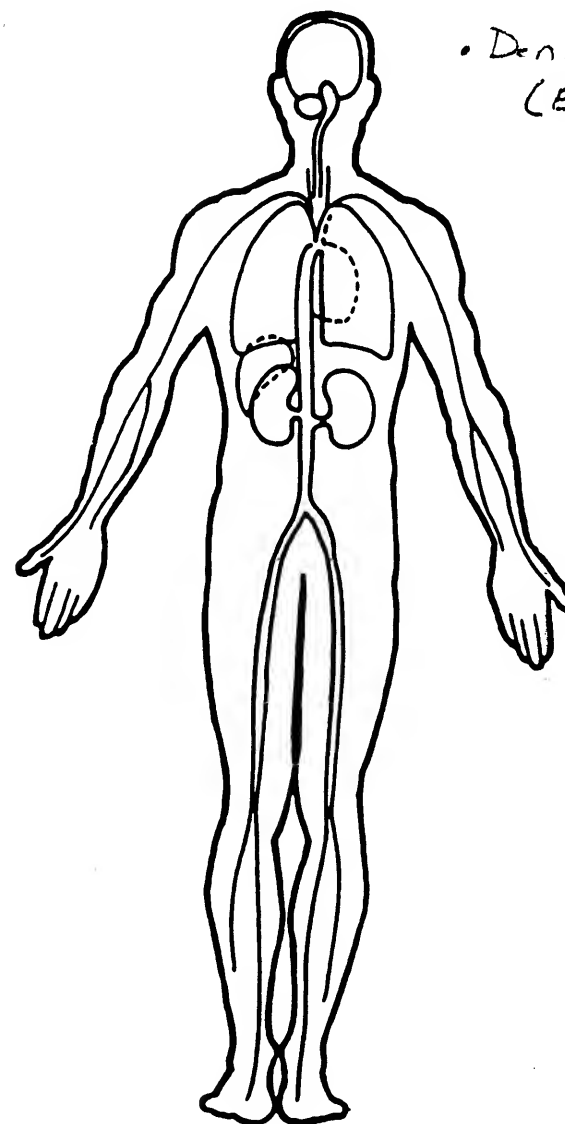
• Alert + Oriented x3

CN II — XII intact  
(ED)

• Sensation intact  
(ED)



• Denies Δ in LOC, N/V, ?, Δ in vision  
(ED)



• Denies LOC  
(EN)

## CAUSE OF DEATH

## ICD-9-CM

## OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
<input type="checkbox"/> Blood and urine tests <input type="checkbox"/> Blood test only <input type="checkbox"/> Urine test only <input type="checkbox"/> Other test <input type="checkbox"/> Unspecified		

## MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
A	Autopsy—medical information based upon an invasive examination of a body
ME	Medical examiner's record—where the information reported on the patient is based on a non-invasive examination of the body
AR	Admission record/summary—any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
FE	Admission/discharge face sheet—face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
DS	Discharge summary—shorten history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
OS	Operative record—summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
FX	Radiographic records—taken after the patient has been admitted, or while in surgery or intensive care
FN	Patient progress notes—supplemental record containing additional nurses notes taken after the patient's admission
HP	History and physical exam—medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
CN	Consultation record—consultations are in essence additional history and physical exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
ER	Emergency room report—where the author of this information is undefined
EN	Emergency room nurse—"nurse/complaint of" section on the emergency room report
ED	Emergency room doctor—"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
NN	Nurse notes—supplemental record containing additional notes taken by the emergency room nurse(s)
EX	Radiographic records—taken during the patients stay in the emergency room
CV	Coroner's verdict—statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
CR	Coroner's report—medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
ET	Emergency medical technician—report by a person who qualifies as an emergency medical services technician (EMS or EMT)
O	Other source—medical information based on an other source (e.g., newspaper, DVM—Doctor of Veterinary Medicine)

DI Discharge instructions

[REDACTED] HOSPITAL  
OUTPATIENT  
REGISTRATION SUMMARY

PAT NO- [REDACTED] ROOM-BED- [REDACTED] MED REC NUMBER- [REDACTED]  
\*\*\*\*\* LAST ADM: [REDACTED]  
REG. DATE: [REDACTED]/96 \* [REDACTED] \* LAST O/P: [REDACTED] 95 4  
REG. TIME: 17:53 \* [REDACTED] \* LAST DSC: [REDACTED] 95  
\* [REDACTED] KS \* URGENT  
\*\*\*\*\*  
SPOUSE: [REDACTED] COUNTY: 030 YEARS IN CNTY: 0  
TYPE: E SVC: EMR PHONE #: [REDACTED] AGE: 027 RACE: A  
S.S. NO: [REDACTED] SEX: F MRTL ST: M BIRTH: [REDACTED]  
MAID. NM:

PATIENTS EMPLOYER: FULL TIME SPOUSE EMPLOYER: FULL TIME  
HOUSEWIFE [REDACTED]

00000

00000

GUARANTOR: [REDACTED] FIN CLASS: P EMPLOYER: FULL TIME  
[REDACTED] RELATION: SELF HOUSEWIFE  
[REDACTED] PHONE: [REDACTED]  
[REDACTED] KS [REDACTED] SSNO: [REDACTED] 00000

EMERGENCY NOTIFY: [REDACTED] RELATIONSHIP: SPOUSE PHONE: [REDACTED]  
ADDRESS: [REDACTED] CITY/ST: [REDACTED] ZIP: 00000  
-INSURANCE CO. NAME---PAYOR---INSURED NAME---CONTRACT #---GROUP---COVRG  
[REDACTED] [REDACTED] [REDACTED] [REDACTED]

PC#: [REDACTED] AUTHORIZATION CODE: [REDACTED]

FAMILY DR - [REDACTED] COMPLAINT- MULTIPLE INJUR  
ATTENDING DR- [REDACTED]  
LIVING WILL: COMMENTS: ALLERGY:  
NATURE OF ACCIDENT- HEAD-ON MVA DATE [REDACTED] TIME-17:00

PRINCIPAL DIAG.:

JCODE:

J  
J  
J  
J  
J  
J  
J  
J  
J  
J

ADDITIONAL DIAGNOSIS OR COMPLICATIONS, OR INFECTIONS:

PROCEDURES:

CONSULTATION WITH:

DISP: HOME, TO ANOTHER HOSP, TO SNF, TO ICF, TO OTH, AMA, EXPIRED  
TREAT TIME: RELEASE TIME: ADMITTED TO:

ADMITTED BY: [REDACTED]



## EMERGENCY ROOM CLINICAL RECORD

PART I - PHYSICIAN

PAGE 1 OF

EMR

27

Hospital  
A CENTER FOR HEALTHCARE

PATIENT	DATE	PATIENT'S NAME	MED. REC #	
	LMP	ALLERGIES	WEIGHT	LAST TETANUS
ORDERS	EMERGENCY RECORD PART II: See Nursing Flow Sheet			
	1	5	9	NOTIFIED <input type="checkbox"/> POLICE <input type="checkbox"/> RELATIVE <input type="checkbox"/> CORONER <input type="checkbox"/> OTHER
	2	6	10	
	3	7	11	
	4	8	12	
SUBJECTIVE	MVA 26yo W♀ presents to ER 5/10 MVA - unrestrained driver in head on collision. (1) Air bags. She denies head trauma but is unsure of the events. She reports mild l/b & low back pain. She denies LOC, N/V, and d/c, disorientation. PMHx: denied Meds. denied.			
	Hx: HTN, NYCT, PEARL, some MA, no Fnd's, no pain. No. Supple, NT Chest. CTA, NT Co. MR @ a galley. Ahd. NABS NT/MD VHS. Ect: 2 pulses. Pender from all 12. Ventr. AA 0+3 (NT) - H for intact. Str. 8+1/2 NTR's 27/4 report. Sensation intact Cerebellum intact. Sensation intact Cerebellum intact. E/F/N 1/1/5. Normal. UL joint. X-ray: N/A.			
OBJECTIVE	CONSULTS: STAFF DR. TIME: 1830 SPECIALIST: TIME:			
	MDS:			
DIAGNOSIS	I N S T R U C T I O N S			
	s/p MVA			

PHYSICIAN

INST SHEET

**COUNTY AMBULANCE SERVICE  
PATIENT REPORT**

Taken to:                      1-17-22 DOB:                      Age/Sex: 26 W-F  
 Arrive:                      Depart:                      Dr. Reg:                      Attnd:                       
 Patient's Name:                      (last)                      (first)                      (mi) SSN:                       
 Address:                      -City:                      State: Ks  
 Situation: 10-48 Position Found: lying in Roadway  
 Location:                       
 Chief Complaint: Pain to (R) side of head (R) arm

	TIME	1720						
	B/P	142/92	/	/	/	/	/	/
V	Pulse	134						
I	Resp.	24						
T	LOC / CRAMS	A						
A	Skin & Temp.	W-D						
L	Pupils							
S	Motor Func.	MAE						
	Oxygen	4L can						
	SpO2:	98						
	I.V.							

Pt Code: Gray Blood Sugar: 11/13 Seatbelt Yes NO - NA

MEDICAL HX: None

No meds

ALLERGIES: NKA

TRAUMA: Hematomas Scapula lat Region

TREATMENT: Manual cervical collar / To LSP with GEL, + secured to car secured  
Condition monitored en Route RMM No change

to unit / SpO2 secondary / Pt Report / Condition monitored en Route RMM No change  
 PRIMARY: SpO2 / Released auto head on coll  
PT got out of car herself / Pt en route Side  
head + (R) arm

PT stated was coming around corner. Close to our side of the Rd  
when hit occurred / Pt monitored en Route RMM No change / To LAMHER Trauma / Released AS to EMT  
 Date:                      Call #                      Technician:

Hospital

PATIENT

## AFTER CARE INSTRUCTION SHEET

BELOW IS A LIST OF FOLLOW-UP INSTRUCTIONS. PLEASE FOLLOW CAREFULLY THOSE INSTRUCTIONS PRINTED NEXT TO THE BLOCKS MARKED BY AN X. THIS IS VITAL TO THE IMPROVEMENT OF YOUR CONDITION.

☒ FOLLOW-UP INSTRUCTIONS

Within the next 7 days, check with your family physician or the physician to whom you are being referred for:

- ☒ Examination and further treatment. *as needed with*
- ☐ Re-evaluation and further treatment.
- ☐ Results of test done.
- ☐ Suture removal.
- ☐ Further Tetanus Immunization.

☐ WOUND CARE

1. Keep dressings clean and dry.
2. Elevate the wound area to help relieve soreness, help speed wound healing and reduce swelling.
3. Despite the greatest care, any wound can become infected. If your wound becomes reddened, swollen, shows pus or red streaks, or feels more sore instead of less as days go by, you must report to your family physician immediately.

☐ DRESSING INSTRUCTIONS

☐ Do not change your dressing. Keep it clean and dry until you see your family physician or the physician to whom you are being referred.

- ☐ Change your dressing once every \_\_\_\_\_
1. Remove dressing carefully.
  2. Cleanse area with \_\_\_\_\_.
  3. Apply \_\_\_\_\_ to the wound.
  4. Follow with application of a clean and preferably sterile dressing or bandage.

☐ MEDICATION INSTRUCTIONS

Any medication has the potential to disagree with you. If you notice any unusual side effects, contact your family physician, the physician to whom you've been referred, or return to the Emergency Department immediately.

- ☐ Take medication as prescribed.
- ☐ Take medication prescribed until conditions improve.
- ☐ Be sure to finish all the medication prescribed.
- ☐ Your medication may cause drowsiness. Do not drive a motor vehicle or work around any dangerous machinery while taking this medication.

☐ SPONGE FOR TEMPERATURE TECHNIQUE

For temperatures above 102°-103°, place child in tub of lukewarm water for 30 minutes. Pour the water over the child. The child may begin to chill, this is a normal response. After 30 minutes, recheck child's temperature. It should be reduced. If not, contact your physician.

☐ GENERAL INSTRUCTIONS

- ☐ Ice to injured area.
- ☐ Heat to injured area.
- ☐ Ice to the injured area for the first 24 hours then heat thereafter.
- ☐ Elevate injured area.
- ☐ Soak injured area in warm water.
- ☐ Take Aspirin or Tylenol for temperature/pain every four hours as needed.
- ☐ Stay off your feet and in bed until condition improves.
- ☐ Do not return to school or work until \_\_\_\_\_.
- ☐ If your ace bandage is too tight, remove and rewrap it.
- ☐ Encourage clear fluids, (any liquid you can see through)

☐ CAST & FRACTURE CARE

Your cast will not be dry for a period of forty eight hours and can easily be broken or damaged. Put the injured area to rest for this period of time. Keep the injured part elevated on a pillow or blanket above the rest of the body for 24 hours. Keep your cast dry at all times. If you have a walking cast on your leg (i.e. one with a rubber heel on it), it is imperative that you do not put any weight on it for 48 hours or it will break. Return to the hospital, immediately if any of the following signs become evident:

1. If your fingers or toes become swollen, numb or blue.
2. If pain does not greatly subside in 12 hrs.
3. If pain becomes worse than at the time of casting.

☒ HEAD INJURY INSTRUCTIONS

Observe the patient for 24 hours. Contact your family physician or return to the Emergency Department immediately if any of the following are observed.

1. Repeated vomiting.
2. Difficulty in rousing patient (the patient should be awakened every 2 hours during the first night)
3. Blurred vision or double vision.
4. Persistent headaches.
5. Weakness of face, arm or leg muscles.
6. Clear or bloody fluid from nose or ears.
7. Twitching or convulsions.
8. A difference in pupil size comparing left to right.
9. Confusion, delirium or disorientation (change in personality).

☒ IMPORTANT NOTICE

Your X-RAY has been interpreted by the Emergency Department physician. Your X-RAY will be reread by a Radiologist in 24 hours. If his interpretation differs from what you have been told the attending physician will be notified.

☒ AFTER CARE OBSERVATION - Return to your Family Physician or to this Emergency Department if your condition gets worse or does not improve.

☐ OTHER☒ PLEASE NOTE

Treatment given in the Emergency Department is offered on a money first care only. Follow-up treatment by physician is important for your safety. You are urged to follow care instructions marked on this sheet.

Treated by

Referred by

Time

1980

Date 7/6

Phone #

MEMORIAL HOSPITAL  
KANSAS

PATIENT NAME:  
ADDRESS:

[REDACTED]  
[REDACTED] KS [REDACTED]

PHONE NO.:

AGE:

27

DATE:

[REDACTED] 96

HOSPITAL/MR NO.:

ER

PHYSICIAN:

[REDACTED]

X-RAY NO.:

[REDACTED]

LUMBAR SPINE:

A two view examination of the lumbar spine shows normal alignment. Pedicles are intact and no bone destruction is seen. No fractures are detected.

IMPRESSION: Normal lumbar spine.

CERVICAL SPINE:

Two view examination shows the centra vertebrae to be of equal heights and intervertebral disc spaces are preserved. There is no evidence to suggest subluxation, dislocation or fracture.

IMPRESSION: Normal two view examination of the cervical spine.

d: [REDACTED] 96 RJM/mm  
t: [REDACTED] 96

[REDACTED] M.D.  
(Dr. has not proofread.)

[REDACTED]

**Hospital**  
A CENTER FOR HEALTHCARE

## ER ASSESSMENT FLOW SHEET

Dat. 4/6 Age 26  
Emergent ☐ Urgent ☐ Non-Emergent ☐ ID Band ☒  
Name [REDACTED]

LMP NOW Tetanus 1992  
Allergies NONE

Regular Medications

Patient arrival time 1730 Mode of Arrival FCA Doctor [REDACTED] Time called 1800 Time arrived 1800 Wt. [REDACTED]

**CIRCLE RESPONSE**  
PRESENT ON ARRIVAL: Spineboard SJD Splint L R  
Arm Leg Philly collar NA  
BREATHING: Normal Labored Rales Wheezing Crackles  
RUL RML RLL LUL LML LLL Apnea  
PULSES: Radial Brachial Apical Femoral Tibial  
Cargid NONE  
Regular Irregular Weak Thready  
PAIN SCALE: 1 2 3 4 5 6 7 8 9 10  
NA (least) (greatest)

ABDOMEN: Soft Tender Rigid Distended Bowel Sounds P  
SKIN INTEGRITY: Abrasions Lacerations Bruises Rash Bite/Sting NA  
SPEECH: Coherent Incoherent Silent Hysterical Slurred (Infant)  
SKELETALMUSCULAR: Swelling Discoloration Redness Arm Leg  
Immobolized Hand Foot R L Cold Pack NA  
PSYCHOSOCIAL: Accompanied Alone Able to Cope Needs Referral  
Family Notified Y N NEED TO NOTIFY Y N  
NURSING DX: pain

Time	Temp.	B/P	P	R	Eyes Open	Verbal Response	Motor Response	Pupil Size R L	Pupil Reaction R L
1750	100.6	100/92	84	16	yes	appropriate	As Spineboarded	6 6	B B

1750 head on MVA pt was driver, driving w.c. to @ side head pain at @ arm pain. pt wearing seat belt to pain to back of head pain getting more intense pain on @ top of head & head MD here v. x-rays pt to x-ray via cart. 1830 pt crying, chest 1703 pt brought to ER @ child's bedside.

ANX Anxiety attack  
Physician's orders:

Time _____ T.O. / V.O. Dr.				Initials
IV's/SL	Time	Size	Site	Initials
1.				
2.				
Drips/IVPB's				
Medications	Dosage/Route	Time	Initials	Patient Response

Treatment/Procedures	Time	Patient Response
02 HX NC		

DISPOSITIONS: Office Admitted STOP Expired Dismissed Transferred (place) \_\_\_\_\_  
Sent by: Car FCA Life Flight Other \_\_\_\_\_  
CONDITION ON DISMISSAL: POOR FAIR GOOD STABLE Time: 1940 Consult with Dr. \_\_\_\_\_ NA  
COBRA signed: Y N Reason for transfer \_\_\_\_\_

VALUABLES: (circle) Dentures Purse Slacks Shirt/Blouse Undergarments Shoes Billfold Keys Glasses Contacts Hearing Aid  
Jewelry (list) \_\_\_\_\_ Cash (amt.) \_\_\_\_\_ Other \_\_\_\_\_  
Disposition of valuables: To Safe To family/friend Home With patient Police FCA/Life Flight

Signature [REDACTED]



**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**CASE VEHICLE RIGHT FRONT PASSENGER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT ASSESSMENT FORM

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number

10

2. Case Number - Stratum

9618

3. Vehicle Number

01

4. Occupant Number

02

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

05

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

1

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

999

Code actual height to the nearest  
centimeter.

(999) Unknown

\_\_\_\_ inches X 2.54 = \_\_\_\_ centimeters

8. Occupant's Weight

019

Code actual weight to the nearest  
kilogram.

(999) Unknown

42 pounds X .4536 = 19 kilograms

9. Occupant's Role

2

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

13

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with  
another occupant or to look out a rear  
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in  
front of seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

## EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

17. Occupant Mobility 1

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown

## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify):

(9) Unknown

19. Manual (Active) Belt System Use 0 0

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify):

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify):

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify):
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 0

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of manual belt system (specify):

(9) Unknown

21. Manual (Active) Belt Failure Modes During Accident 0

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):

(8) Other manual belt failure (specify):

(9) Unknown

22. Manual Shoulder Belt Upper Anchorage Adjustment 4

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

*Between mid full down*23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify):
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify):

(8) Other improper use of automatic belt system (specify):

(9) Unknown

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify):

- (6) Broken retractor
- (7) Combination of above (specify):
- (8) Other automatic belt failure (specify):

(9) Unknown

## POLICE REPORTED RESTRAINT USE

## AIR BAG SYSTEM FUNCTION

28. Police Reported Belt Use 1

- (0) None used
- (1) Police did not indicate belt use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Automatic belt
- (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 2

- (0) No air bag available
- (1) Police did not indicate air bag availability/function
- (2) Deployed
- (3) Not deployed
- (4) Unknown if deployed
- (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection
- ☐ Official injury data
- ☐ Driver/occupant interview
- ☐ Other (specify):
- ☐ Unknown if belt used

30. Frontal Air Bag System 1

Availability/Function

(This Occupant Position)

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

31. Frontal Air Bag System Deployment 1

(This Occupant Position)

- (0) Not equipped/not available
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

32. Other Than First Seat Frontal Air Bag 0

Availability/Function

(This Occupant Position)

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First 0  
Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

34. Are There Indications of Air Bag System 1  
Failure?

(This Occupant Position)

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):

(9) Unknown



## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 1

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 1

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 1

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify):  
\_\_\_\_\_  
(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 01

- (00) Not equipped/not available  
\_\_\_\_\_  
Code the accident event sequence number that initiated the air bag deployment  
(96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 1

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify):  
\_\_\_\_\_  
(6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of Delta V For Air Bag Deployment Impact + 0 0 1 8

- (\_000) Not equipped/not available  
Code the value of the delta V for the impact that initiated the air bag deployment  
(\_996) Deployment, unknown longitudinal Delta V  
(\_997) Not deployed  
(\_998) Unknown if deployed  
(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 2

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): Hit W.S. cracked scratched  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 01

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify):  
\_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*44. Source of Air Bag Damage 01

(00) Not equipped/not available

(01) Not damaged

(02) Object worn by occupant, (specify):  
\_\_\_\_\_(03) Object carried by occupant, (specify):  
\_\_\_\_\_(04) Adaptive/assistive controls, (specify):  
\_\_\_\_\_

(05) Fire in vehicle

(06) Thermal burns

(07) Rescue or emergency efforts

(88) Other damage source (specify):  
\_\_\_\_\_

(95) Damaged, unknown source

(96) Deployed, unknown if damaged

(97) Not deployed

(98) Unknown if deployed

(99) Unknown

45. Was The Air Bag Tethered? 2

(0) Not equipped/not available

(1) No

(2) Yes (specify number of tether straps):  
1

(3) Deployed, unknown if tethered

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

46. Did The Air Bag Have Vent Ports? 2

(0) Not equipped/not available

(1) No

(2) Yes (specify number of vent ports):  
2

(3) Deployed, unknown if vent ports present

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

47. Was the Air Bag in this Occupant's Position  
Contacted by Another Occupant? 1

(0) Not equipped/not available

(1) No

(2) Yes (specify):  
\_\_\_\_\_(3) Deployed, unknown if other occupant contact  
to air bag

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

48. Was This Occupant Wearing Eye-wear? 1

(0) Not air bag equipped/air bag not available

(1) No

(2) Eyeglasses/sunglasses

(3) Contact lenses

(4) Deployed, unknown if eyewear worn

(7) Not deployed

(8) Unknown if deployed

(9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**49. Head Restraint Type/Damage by Occupant  
at This Occupant Position 3

(0) No head restraints

(1) Integral—no damage

(2) Integral—damaged during accident

(3) Adjustable—no damage

(4) Adjustable—damaged during accident

(5) Add-on—no damage

(6) Add-on—damaged during accident

(8) Other (specify):  
\_\_\_\_\_

(9) Unknown

50. Seat Type (this Occupant Position) 06

(00) Occupant not seated or no seat

(01) Bucket

(02) Bucket with folding back

(03) Bench

(04) Bench with separate back cushions

(05) Bench with folding back(s)

(06) Split bench with separate back cushions

(07) Split bench with folding back(s)

(08) Pedestal (i.e., column supported)

(09) Box mounted seat (i.e., van type)

(10) Other seat type (specify):  
\_\_\_\_\_

(99) Unknown

51. Seat Orientation (this Occupant Position) 1

(0) Occupant not seated or no seat

(1) Forward facing seat

(2) Rear facing seat

(3) Side facing seat (inward)

(4) Side facing seat (outward)

(8) Other (specify):  
\_\_\_\_\_

(9) Unknown

52. Seat Track Adjusted Position Prior To Impact 3

(0) Occupant not seated or no seat

(1) Non-adjustable seat track

**Adjustable Seat Track**

(2) Seat at forward most track position

(3) Seat between forward most and middle track  
positions

(4) Seat at middle track position

(5) Seat between middle and rear most track  
positions

(6) Seat at rear most track position

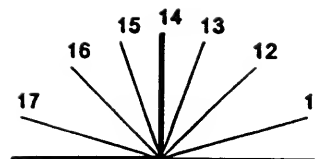
(9) Unknown

HEAD RESTRAINT AND SEAT EVALUATION *continued*53. Seat Back Incline Prior and Post Impact 23

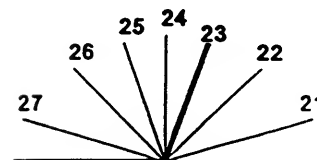
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

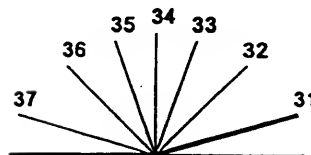
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 000

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 00

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0059. Child Safety Seat Shield Usage 0060. Child Safety Seat Tether Usage 00Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)**4

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality**1

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)**2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):

(9) Unknown

**64. Hospital Stay**00

(00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

(61) 61 days or more

(99) Unknown

**65. Working Days Lost**62

Code the number of days (up through 60) that the occupant lost from work due to the accident

(00) No working days lost

(61) 61 days or more

(62) Fatally injured

(97) Not working prior to accident

(99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**



## TO BE CODED BY THE ZONE CENTER

## INJURY CONSEQUENCES

## TRAUMA DATA

## 66. Time to Death

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

## 67. 1st Medically Reported Cause of Death

## 68. 2nd Medically Reported Cause of Death

## 69. 3rd Medically Reported Cause of Death

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

## 70. Number of Recorded Injuries for This Occupant

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

## 71. Glasgow Coma Scale (GCS) Score (at Medical Facility)

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

## 72. Was the Occupant Given Blood?

- (1) No - blood not given  
(2) Yes - blood given (specify units):  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) -  $\text{HCO}_3$ 

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the  $\text{HCO}_3$   
(96) ABGs reported,  $\text{HCO}_3$  unknown  
(97) Injured, details unknown  
(99) Unknown if injured

Base Excess -30.8

## BELT USE DETERMINATION

## 74. Primary Source of Belt Use Determination

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used

**NASS CDS OCCUPANT INJURY FORM:**  
**CASE VEHICLE RIGHT FRONT PASSENGER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number <u>10</u>						3. Vehicle Number <u>01</u>					
2. Case Number - Stratum <u>9618</u>						4. Occupant Number <u>02</u>					

INJURY DATA																						
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.																						
Source of Injury Data	Body Region	A.I.S. - 90				Injury Source	Injury Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number													
		Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity																	
Concussion (GCS 1st 3)	5	3	6	1	7	6	8	08	9	24	10	5	11	0	12	180	13	1	14	1	15	00
Atlanto-Occipital Dislocation	16	3	17	6	18	5	19	02	20	08	21	2	22	6	23	180	24	1	25	1	26	00
Abrasions neck completely across	27	3	28	3	29	9	30	02	31	02	32	1	33	4	34	180	35	1	36	1	37	00
Avulsed Teeth (4)	38	8	39	2	40	5	41	14	42	02	43	1	44	8	45	185	46	3	47	1	48	00
5th	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	64	65	66	67	68	69	70
6th	71	72	73	74	75	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90	91	92
7th	93	94	95	96	97	98	99	100	101	102	103	104	105	106	107	108	109	110	111	112	113	114
8th																						
9th																						
10th																						

**.I.S. - 90**

A.I.S. - 90											
Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number	
11th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
12th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
13th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
14th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
15th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
16th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
17th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
18th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
19th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
20th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
21st	—	—	—	— — —	—	—	— — — —	—	—	— — —	
22nd	—	—	—	— — —	—	—	— — — —	—	—	— — —	
23rd	—	—	—	— — —	—	—	— — — —	—	—	— — —	
24th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
25th	—	—	—	— — —	—	—	— — — —	—	—	— — —	

**OCCUPANT INJURY CLASSIFICATION**

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>	To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		The exceptions to this rule apply to:	(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified			(9) Unknown
			(0) Whole region
Type of Anatomic Structure	Whole Area	Abbreviated Injury Scale	
(1) Whole Area	(02) Skin - Abrasion	(1) Minor Injury	
(2) Vessels	(04) Skin - Contusion	(2) Moderate Injury	
(3) Nerves	(06) Skin - Laceration	(3) Serious Injury	
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion	(4) Severe Injury	
(5) Skeletal (includes joints)	(10) Amputation	(5) Critical Injury	
(6) Head - LOC	(20) Burn	(6) Maximum (untreatable)	
(9) Skin	(30) Crush	(7) Injured, unknown severity	
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		

SOURCE OF INJURY DATA	INJURY SOURCE CONFIDENCE LEVEL	DIRECT/INDIRECT INJURY
<u>OFFICIAL RECORDS</u> (1) Autopsy records with or without hospital/medical records (2) Hospital/medical records other than emergency room (e.g., discharge summary) (3) Emergency room records only (including associated X-rays or other lab reports) (4) Private physician, walk-in or emergency clinic  <u>UNOFFICIAL RECORDS</u> (5) Lay coroner report (6) E.M.S. personnel (7) Interviewee (8) Other source (specify): _____ (9) Police	(1) Certain (2) Probable (3) Possible (9) Unknown	(1) Direct contact injury (2) Indirect contact injury (3) Noncontact injury (7) Injured, unknown source



## OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

• Air Bag deployed (CR)

Restrained?

✓ No (ER)

✓ Yes (CR)

Blood Alcohol Level (mg/dl)

BAL = \_\_\_\_

Glasgow Coma Scale Score

GCSS = 3  
(ET, CB, ER)

Units of Blood Given

Units = \_\_\_\_

Arterial Blood Gases

pH = 6.97 1st 2nd 6.53

PO<sub>2</sub> = 13 3.7

PCO<sub>2</sub> = 89 173.3

HCO<sub>3</sub> = 20.7 14.5

Base -14.0 -30.8  
Excess (Laboratory)

• Estimate Weight: 15 kg  
CCB

• Seatbelt: No (ET)

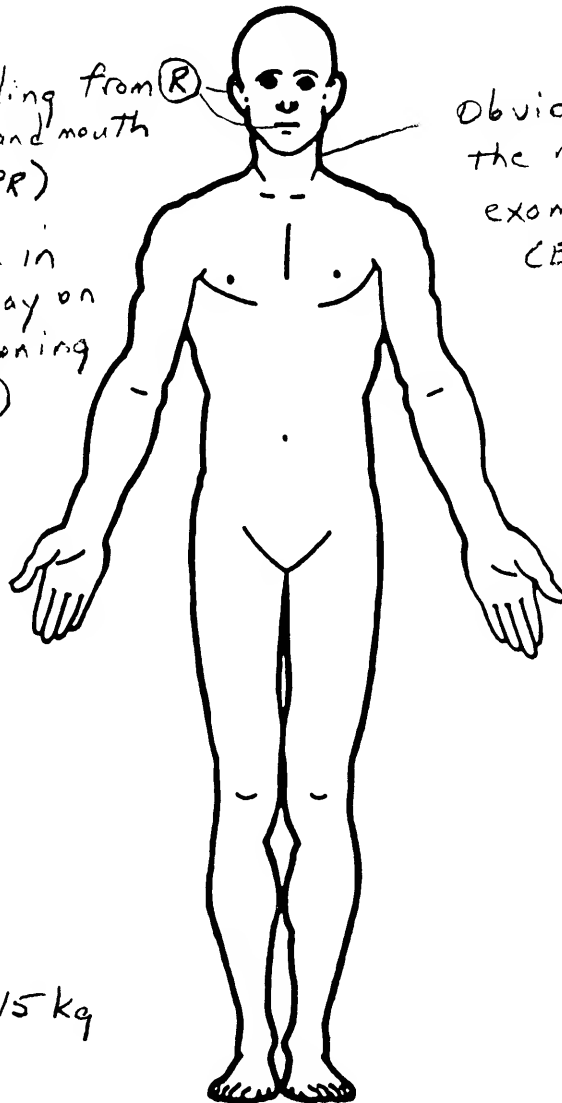
• Mother could not remember if child had seatbelt or not at time of crash (RR)  
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

• Seatbelt on (CR)

• Bleeding from R ear and mouth (ET, RR)

• Blood in airway on suctioning (RR)

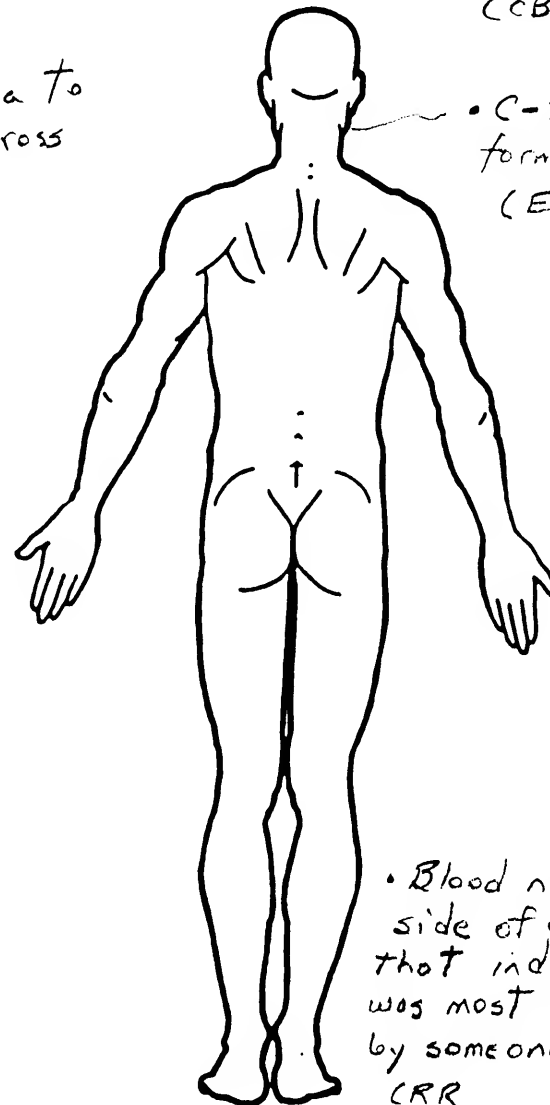
Obvious trauma to the neck on gross examination (ER)



• Found supine on ground (ET, RR)

• C<sub>1-2</sub> Injury (CB)

• C-Spine deformity noted (ET, RR)

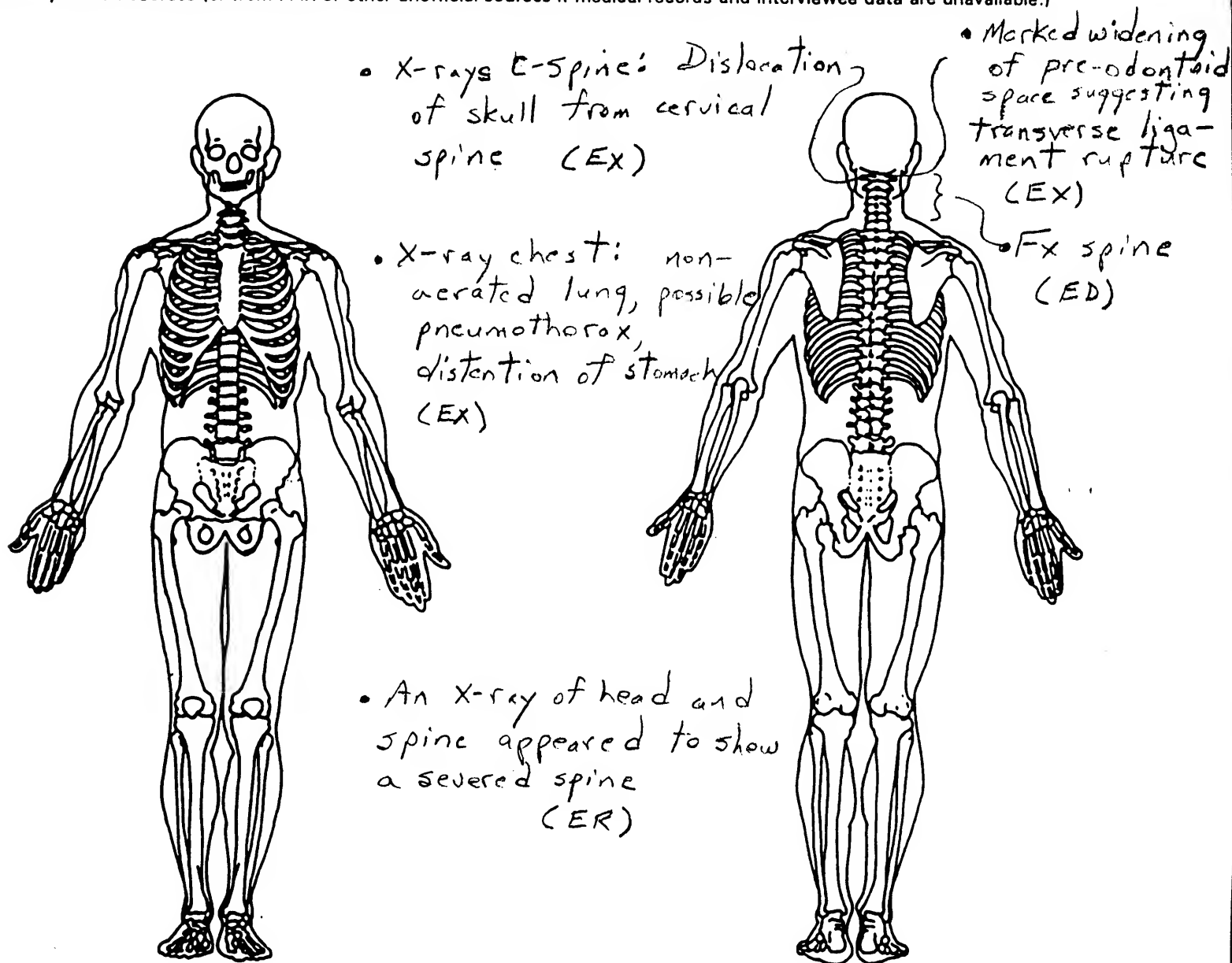


• Blood noted on R side of driver's seat that indicated that Pt was most likely removed by someone at scene (RR)

Expired 1:36 post-crash (EN, CB)

## OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## INJURY SOURCES

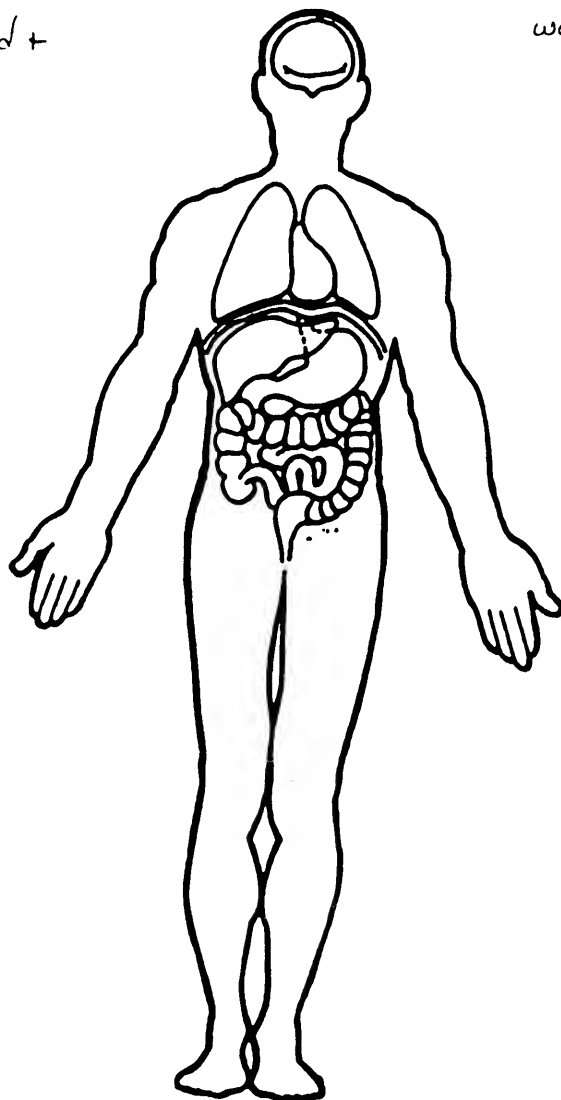
<b>FRONT</b>			
(001) Windshield	(102) Right side hardware or armrest	(183) Air bag-passenger side and object held	(411) Wall mounted head rest (used behind wheel chair)
(002) Mirror	(103) Right A (A1/A2)-pillar	(184) Air bag-passenger side and object in mouth	(412) Other adaptive device (specify): _____
(003) Sunvisor	(104) Right B-pillar	(185) Air bag compartment cover-passenger side	
(004) Steering wheel rim	(105) Other right pillar (specify): _____	(186) Air bag compartment cover-passenger side and eyewear	<b>EXTERIOR of OCCUPANT'S VEHICLE</b>
(005) Steering wheel hub/spoke	(106) Right side window glass	(187) Air bag compartment cover-passenger side and jewelry	(451) Hood
(006) Steering wheel (combination of codes 004 and 005)	(107) Right side window frame	(188) Air bag compartment cover-passenger side and object held	(452) Outside hardware (e.g., outside mirror, antenna)
(007) Steering column, transmission selector lever, other attachment	(108) Right side window sill	(189) Air bag compartment cover-passenger side and object in mouth	(453) Other exterior surface or tires (specify): _____
(008) Cellular telephone or CB radio	(109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.	(190) Other air bag (specify) _____	(454) Unknown exterior objects
(009) Add on equipment (e.g., tape deck, air conditioner)	(110) Other right side object (specify): _____	(195) Other air bag compartment cover (specify) _____	<b>EXTERIOR OF OTHER MOTOR VEHICLE</b>
(010) Left instrument panel and below	<b>INTERIOR</b>		(501) Front bumper
(011) Center instrument panel and below	(151) Seat, back support	<b>ROOF</b>	(502) Hood edge
(012) Right instrument panel and below	(152) Belt restraint webbing/buckle	(201) Front header	(503) Other front of vehicle (specify): _____
(013) Glove compartment door	(153) Belt restraint B-pillar or door frame attachment point	(202) Rear header	(504) Hood
(014) Knee bolster	(154) Other restraint system component (specify): _____	(203) Roof left side rail	(505) Hood ornament
(015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)	(155) Head restraint system	(204) Roof right side rail	(506) Windshield, roof rail, A-pillar
(016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)	(160) Other occupants (specify): _____	(205) Roof or convertible top	(507) Side surface
(017) Windshield reinforced by exterior object (specify) _____	(161) Interior loose objects	<b>FLOOR</b>	(508) Side mirrors
(019) Other front object (specify): _____	(162) Child safety seat (specify): _____	(251) Floor (including toe pan)	(509) Other side protrusions (specify): _____
	(163) Other interior object (specify): _____	(252) Floor or console mounted transmission lever, including console	(510) Rear surface
<b>LEFT SIDE</b>	<b>AIR BAG</b>	(253) Parking brake handle	(511) Undercarriage
(051) Left side interior surface, excluding hardware or armrests	(170) Air bag-driver side	(254) Foot controls including parking brake	(512) Tires and wheels
(052) Left side hardware or armrest	(171) Air bag-driver side and eyewear	<b>REAR</b>	(513) Other exterior of other motor vehicle (specify): _____
(053) Left A (A1/A2)-pillar	(172) Air bag-driver side and jewelry	(301) Backlight (rear window)	<b>OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT</b>
(054) Left B-pillar	(173) Air bag-driver side and object held	(302) Backlight storage rack, door, etc.	(551) Ground
(055) Other left pillar (specify): _____	(174) Air bag-driver side and object in mouth	(303) Other rear object (specify): _____	(598) Other vehicle or object (specify): _____
(056) Left side window glass	(175) Air bag compartment cover-driver side	<b>ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT</b>	(599) Unknown vehicle or object
(057) Left side window frame	(176) Air bag compartment cover-driver side and eyewear	(401) Hand controls for braking/acceleration	<b>NONCONTACT INJURY</b>
(058) Left side window sill	(177) Air bag compartment cover-driver side and jewelry	(402) Steering control devices (attached to OEM steering wheel)	(601) Fire in vehicle
(059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.	(178) Air bag compartment cover-driver side and object held	(403) Steering knob attached to steering wheel	(602) Flying glass
(060) Other left side object (specify): _____	(179) Air bag compartment cover-driver side and object in mouth	(405) Replacement steering wheel (i.e., reduced diameter)	(603) Other noncontact injury source (specify): _____
<b>RIGHT SIDE</b>	(180) Air bag-passenger side	(406) Joy stick steering controls	(604) Air bag exhaust gases
(101) Right side interior surface, excluding hardware or armrests	(181) Air bag-passenger side and eyewear	(407) Wheelchair tie-downs	(697) Injured, unknown source
	(182) Air bag-passenger side and jewelry	(408) Modification to seat belts, (specify): _____	
		(409) Additional or relocated switches, (specify): _____	
		(410) Raised roof	

## OFFICIAL INJURY DATA —INTERNAL INJURIES

- From arrival @ scene to arrival @ hospital: B/P, Pulse, Respirations, Motor Function — Absent; pupils fixed and dilated (8 mm) (ET, RR)  
Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

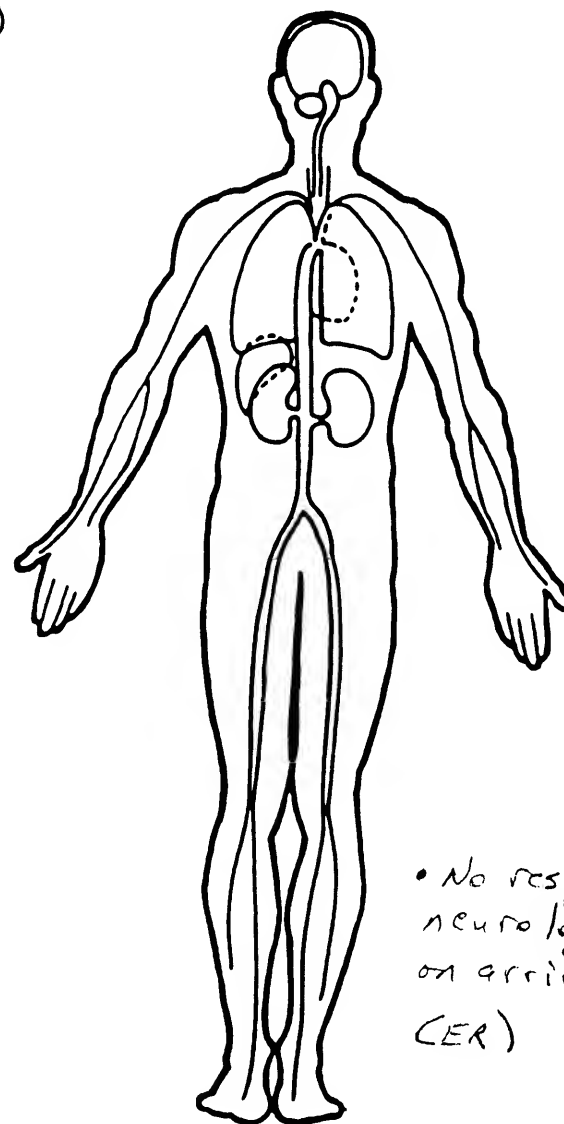
- Blue upon arrival  
(ET, RR, EN)

- Pupils fixed + dilated on arrival ER  
(ER)



- Found with a heart-beat  
but apneic + no good pulse  
was evident (ER)

- Found unresponsive  
(RR)



- No response  
neurologically  
on arrival @ ER  
(ER)

## CAUSE OF DEATH

Vehicular injury (CR)

## ICD-9-CM

## OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
<input type="checkbox"/> Blood and urine tests <input type="checkbox"/> Blood test only <input type="checkbox"/> Urine test only <input type="checkbox"/> Other test <input type="checkbox"/> Unspecified		

## MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
<b>A</b>	Autopsy—medical information based upon an invasive examination of a body
<b>ME</b>	Medical examiner's record—where the information reported on the patient is based on a non-invasive examination of the body
<b>AR</b>	Admission record/summary—any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
<b>FS</b>	Admission/discharge face sheet—face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
<b>DS</b>	Discharge summary—shortens history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
<b>OS</b>	Operative record—summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
<b>FX</b>	Radiographic records—taken after the patient has been admitted, or while in surgery or intensive care
<b>PN</b>	Patient progress notes—supplemental record containing additional nurses notes taken after the patient's admission
<b>HP</b>	History and physical exam—medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
<b>CN</b>	Consultation record—consultations are in essence additional history and physical exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
<b>ER</b>	Emergency room report—where the author of this information is undefined
<b>EN</b>	Emergency room nurse—"nurse/complaint of" section on the emergency room report
<b>ED</b>	Emergency room doctor—"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
<b>NN</b>	Nurse notes—supplemental record containing additional notes taken by the emergency room nurse(s)
<b>EX</b>	Radiographic records—taken during the patient's stay in the emergency room
<b>CV</b>	Coroner's verdict—statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
<b>CR</b>	Coroner's report—medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
<b>ET</b>	Emergency medical technician—report by a person who qualifies as an emergency medical services technician (EMS or EMT)
<b>O</b>	Other source—medical information based on an other source (e.g., newspaper, DVM—Doctor of Veterinary Medicine)

RR = [REDACTED]  
 CB = Code Blue Documentation



CASE REPORT: CALLS FOR SERVICE DATE PRINTED: 06/27/96

50.CID#: \_\_\_\_\_

00.Agency: COUNTY EMS 01.Inc #: 02.Rec By:

03.Date Reported: 04.Time Reported: 1653 05.Shift: 2 3 PM-11 PM

06.Activity: E2900 EMS/10-48 07.Priority: 1 EMERGENCY-SIREN

08.City 09.Loc RD 10.EMS EMS

11.Apt# Name Tel Rec E Type R

16.Add: 17.City 18.St: KS

19.Rem: TWO CAR ALL CAN HEAR IS PEOPLE SCREAMING

20.Units: 0622 30.Off:

32.Disp Transp\* Enrt 1712 Arr 1723 Comp 1727

39.Other Agcy: 41.Ad: 42.Dsp By: 43.Case#: 44.Dispo: R

45.Line-1: 2ND CALLER ADV ALL SHE CAN HEAR IS SCREAMING, DOES NOT KNOW WHAT

46.Line-2: IS GOING ON, ( 2ND RP)

47.Line-3:

48.Line-4:

49.Line-5:

06/27 1654 Verified  
06/27 1654 (S)Pol: 000WS0 (7)Fir: 0007 (E)EMS: EMS ( )Zone: \*  
06/27 1655 \*\* Initial Call Posted \*\*  
06/27 1655 <UNITS>: 0622  
06/27 1656 \*\* Call Updated \*\*  
06/27 1657 \*\* Call Updated \*\*  
06/27 1703 APPX ADV WILL BE HEAD ON COLLISION KY TER/RILE  
06/27 1703 Y RD  
06/27 1704 ADV CPR IN PROGRESS ON 1 CODE 1 JUVENILE  
06/27 1704 2ND AMBULANCE ENR  
06/27 1705 1704 621 10-8 ENR  
06/27 1706 \*\* Call Updated \*\*  
06/27 1713 622 10-14 10-39 1 CODE BLUE ENR RMH  
06/27 1713 \*\* Call Updated \*\*  
06/27 1718 \*\* Call Updated \*\*  
06/27 1724 \*\* Call Updated \*\*

**FRANKLIN COUNTY AMBULANCE SERVICE  
PATIENT REPORT**

1703

Taken to: Rm H / 1714 DOB: [REDACTED] Age/Sex: 5 Wm  
 Arrive: \_\_\_\_\_ Depart: \_\_\_\_\_ Dr. Reg: [REDACTED] Attn: [REDACTED]  
 Patient's Name [REDACTED] (last) [REDACTED] (first) [REDACTED] (mi) SS# NONE  
 Address: [REDACTED] Rd. City: [REDACTED] State: KS  
 Situation: 10-48 2-veh. Head on Position Found: Supine on ground  
 Location: [REDACTED] Terr At [REDACTED]  
 Chief Complaint: Trauma Code Blue

	TIME	1704	1712	1723	(At Rm H)			
	B/P	Absent	Absent	Absent	/	/	/	
V	Pulse	Absent	Absent	Absent				
I	Resp.	Absent	Absent	Absent				
I	LOC / CRAMS	U/O	U/O	U/O				
A	Skin & Temp.	W/m	W/O	W/O				
L	Pupils	Fixed And Dilated	→					
S	Motor Func.	Absent	Absent	Absent				
	Oxygen	BVM						
	SpO2:	154pm	154pm	154pm				
	I.V.	—	—	—				

Pt Code: BlueBlood Sugar: N/ASeatbelt Yes (NO) NAMEDICAL HX: NONEALLERGIES: NONETRAUMA: C-spine deformity, T6SS Head Trauma, bleeding From R ear, mouthTREATMENT: ABC/CPR/O2 via demand valve/C-collar/ISB/CED/to unit/DPA/suction/BVM/Pulse check/CPR create/Suction/Pt. Report/No changes/to ER #3/Released.SUMMARY Pt. found code Blue/involved in head on mva/no pulse, Pupils Fixed and Dilated/No Resp./Responders started CPR/O2/GPA/C-collar/(Sun) Blue upon arrival/skin white w/100% O2/Transported with CPR/BVM/No changes/Released alive/unstable to [REDACTED] MD

RUN REPORT

CALLERS NAME : CENTRAL DISPATCH [REDACTED] PHONE NUMBER: ALERT TONES  
ODOMETER START : NONE ODOMETER END: NONE  
CHARGES : BASE RATE x1, MILES x10, O2 x1, BVM x1, OPA x1,  
SUCTION x2, E-COLLAR x1, DISP. x1

TYPE THE CALL IN PARAGRAPH FORM INCLUDING ALL PERTINENT INFORMATION

\*\*\*\*\*

[REDACTED] TWP. FIRST RESPONDER [REDACTED] WAS THE FIRST  
RESPONDER TO THIS CALL FOLLOWED BY [REDACTED]  
[REDACTED] FCAS UNIT [REDACTED] FCAS [REDACTED]  
UNIT [REDACTED]

THE PT.. A 5 Y/O WHITE MALE WAS FOUND SUPINE ON THE GROUND  
ALONG THE ROADWAY AT THE CORNER OF [REDACTED] TERR. AND [REDACTED] RD.

THE PT. ([REDACTED]) WAS SUFFERING FROM INJURES DUE TO A 2-  
VEH HEAD-ON 10-48.

THE PT. WAS FOUND UNRESPONSIVE. THE PT. HAD NO PULSE, NO  
RESPIRATIONS, AND HIS PUPILS WERE FIXED AND DILATED. THE PT. HAD BEEN  
INVOLVED IN A HEAD-ON 10-48. THE PT'S MOTHER COULD NOT REMEMBER IF  
THE CHILD HAD THE SEATBELT ON OR NOT AT THE TIME OF THE ACCIDENT. THE  
PT. DID HAVE DEFORMITY NOTED TO THE C-SPINE AREA. THE PT. HAD BLOOD  
COMING FROM THE R. EAR AND MOUTH. THE PT. WAS CYANOTIC IN COLOR.  
THERE WAS NO FURTHER TRAUMA NOTED AT THIS TIME. IT WAS UNKNOWN HOW THE  
CHILD GOT FROM THE CAR TO THE LOCATION HE WAS FOUND AT. THERE WAS  
BLOOD NOTED ON THE R. SIDE OF THE DRIVERS SEAT THAT INDICATED THAT  
THE PT. WAS MOST LIKELY REMOVED FROM THE CAR BY SOMEONE AT THE SCENE.  
FR. [REDACTED] STATED THAT THE CHILD WAS LYING ON THE GROUND UPON HIS  
ARRIVAL ALSO. THE PT'S PAST MED. HX. WAS UNKNOWN.

THE PT. WAS RECEIVING AID PRIOR TO OUR ARRIVAL BY FIRST  
RESPONDER [REDACTED] AND A BYSTANDER IN THE FORM OF CPR. THIS WAS  
PERFORMED CORRECTLY.

THE PT'S ABC'S WERE OBTAINED BY [REDACTED]. CPR WAS CONTINUED ON THE CHILD WITH COMPRESSIONS BY THE BYSTANDER AND VENTILATIONS BY [REDACTED]. A PED. E-COLLAR WAS APPLIED TO THE PT'S NECK BY [REDACTED]. THE PT'S VENTILATIONS WERE TAKEN OVER BY [REDACTED] VIA DEMAND VALVE AND COMPRESSIONS BY [REDACTED]. THE PT. WAS LOGROLLED TO A PED. [REDACTED]. THE PT. WAS SECURED TO THE [REDACTED] BY [REDACTED]. THE PT. WAS MOVED TO THE COT BY [REDACTED]. THE PT. WAS MOVED TO THE UNIT WITH CPR INPROGRESS. A 60 MM OPA WAS PLACED IN THE AIRWAY BY [REDACTED]. THE PT'S AIRWAY WAS SUCTIONED BY [REDACTED]. THERE WAS BLOOD PRESENT UPON SUCTIONING. O2 WAS DELIVERED VIA PED. [REDACTED] BY [REDACTED] AND COMPRESSIONS BY [REDACTED]. A PULSES CHECK WAS PERFORMED AT 1712 HRS WITH NO PULSE PRESENT. CPR WAS CONTINUED EN ROUTE TO [REDACTED] BY [REDACTED]. A PT. REPORT WAS GIVEN TO [REDACTED] AT APPROX. 1714 HRS BY [REDACTED]. THEY ADVISED NO QUESTIONS OR ORDERS. THE PT'S AIRWAY WAS SUCTIONED SEVERAL TIMES EN ROUTE TO [REDACTED]. THERE WERE NO CHANGES IN THE PT'S CONDITION EN ROUTE. THE PT. WAS MOVED INTO THE ER WITH CPR INPROGRESS. THE PT. WAS MOVED TO THE ER BED VIA LSB/CID BY [REDACTED].

THE PT. WAS RELEASED ALIVE/UNSTABLE IN CARE OF DR. [REDACTED] MD.

NOTE: GLOVES WERE WORN FOR CALL BY [REDACTED].

NOTE: [REDACTED] WAS [REDACTED] FOR TRANSPORT.

DRIVER: [REDACTED] EMT-I / [REDACTED]

TECHNICIAN: [REDACTED]

(signed)

[REDACTED] HOSPITAL  
O U T P A T I E N T  
R E G I S T R A T I O N   S U M M A R Y

PAT NO- [REDACTED] ROOM-BED- [REDACTED] MED REC NUMBER- [REDACTED]  
\*\*\*\*\*  
REG. DATE: [REDACTED] \* [REDACTED] LAST ADM: [REDACTED]  
REG. TIME: 17:41 \* [REDACTED] \* LAST O/P: [REDACTED] 1  
\* [REDACTED] \* LAST DSC: 0/00/00  
\*\*\*\*\* KS \*\*\*\*\* EMERGENCY  
\*\*\*\*\* AMBUL./RESCUE/POLICE  
SPOUSE: COUNTY: [REDACTED] YEARS IN CNTY: 0  
TYPE: E SVC: EMR PHONE [REDACTED] AGE: 005 RACE: A  
S.S. NO: [REDACTED] SEX: M MRTL ST: S BIRTH: [REDACTED] 90  
MAID. NM:

PATIENTS EMPLOYER: FULL TIME SPOUSE EMPLOYER:  
CHILD

00000

00000

GUARANTOR: [REDACTED] FIN CLASS: P EMPLOYER: FULL TIME  
[REDACTED] RELATION: PARENT  
[REDACTED] PHONE [REDACTED]  
KS [REDACTED] SSNO: [REDACTED] 00000

EMERG NOTIFY: RELATIONSHIP: PHONE:  
ADDRESS: CITY/ST: ZIP: 00000  
-INSURANCE CO. NAME---PAYOR---INJURED NAME---CONTRACT #---GROUP---COVRG  
[REDACTED] [REDACTED]

PC#: AUTHORIZATION CODE:

FAMILY DR - 080 D [REDACTED] COMPLAINT- MULTIPLE INJURIES  
ATTENDING DR- 080 D [REDACTED]  
LIVING WILL: COMMENTS: ALLERGY:  
NATURE OF ACCIDENT- HEAD ON MVA DATE [REDACTED] TIME-17:00

PRINCIPAL DIAG.:

JCODE:

J  
J  
J  
J  
J  
J  
J  
J  
J  
J

ADDITIONAL DIAGNOSIS OR COMPLICATIONS, OR INFECTIONS:

PROCEDURES:

CONSULTATION WITH:

DISP: HOME, TO ANOTHER HOSP, TO SNF, TO ICF, TO OTH, AMA, EXPIRED  
TREAT TIME: RELEASE TIME: ADMITTED TO:

ADMITTED BY: [REDACTED]




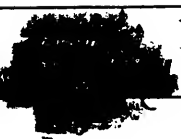
## EMERGENCY ROOM CLINICAL RECORD

PART 1 - PHYSICIAN

PAGE 1 OF \_\_\_\_\_


**Hospital**  
 A CENTER FOR HEALTHCARE

<b>P A T I E N T</b>	DATE	PATIENT'S NAME 		MED. REC #		
	LMP	ALLERGIES		WEIGHT	LAST TETANUS	


(SM)

<b>O R D E R S</b>	EMERGENCY RECORD PART II: See Nursing Flow Sheet						<b>NOTIFIED</b> <input type="checkbox"/> POLICE <input type="checkbox"/> RELATIVE <input type="checkbox"/> CORONER <input type="checkbox"/> OTHER _____
	1		5		9		
	2		6		10		
	3		7		11		
	4		8		12		


<b>S U B J E C T I V E</b>	<i>Code Blue</i> <i>See dictation</i>	

<b>O B J E C T I V E</b>				

CONSULTS	STAFF DR.	TIME:	SPECIALIST:	TIME:
----------	-----------	-------	-------------	-------

<b>M E D S</b>			<b>I N S T R U C T I O N S</b>		

<b>D I A G N O S I S</b>	<i>Fracture - spine</i>	

PHYSICIAN SIGNATURE: 
INST SHEET ☐

# Hospital

## Code Blue Documentation

Male age approx 54 yrs Est wt 15kg

patient imprint

Date: [REDACTED]	Time: 1724	Reason: Respiratory Cardiac Trauma	Patient Name: [REDACTED]						
Advanced Directive: Yes <input checked="" type="radio"/> No <input type="radio"/>	Primary Physician: [REDACTED]		Notified: Yes <input type="radio"/> No <input type="radio"/>						
CPR In Progress: <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	Alway In Place: <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/> N/A	Type: <input checked="" type="radio"/> Oral <input type="radio"/> C-Tube <input type="radio"/> ET <input type="radio"/> NT	Size: [REDACTED]						
Personnel Present:									
Physician: [REDACTED]	Arrival Time: 1716	Physician: [REDACTED]	Arrival Time: [REDACTED]						
ICU Nurse: [REDACTED]	Arrival Time: 1715	Supervisor: [REDACTED] RN	Arrival Time: 1715						
Nurse: [REDACTED] RN	Arrival Time: 1715	Nurse: [REDACTED]	Arrival Time: 1725						
RT: [REDACTED]	Arrival Time: 1715	Pharmacy: [REDACTED]	Arrival Time: [REDACTED]						
Time	Blood Pressure	Pulse	Respirations	ECG Rhythm	Defib (Joules)	Atropine	Epinephrine	Lidocaine	IV's, Procedures, Other Medications, Assessments:
1725	✓	✓	✓						Intubated 5.0 ET, NG placed IV #20 Telco Rt arm,
1727						1.5ml	1.5ml		
1729		55	✓	Idio Vent		3ml			Bagged per ET
1735	✓	48		Idio Vent					Numerous attempt to place NG - OG - unsuccessful due to trauma
1737	✓	✓	✓				2ml		CPR in progress - ABG's drawn
1739						1.5ml			CPR continued CXR done - 8th floor cardio
1740	✓	✓	✓						(Report given to [REDACTED] Lifeflight)
1745							3ml		ETA 18min ≈ 1800hrs
—							5ml		#2 IV 20 Gadelco Rt arm
1752							5ml		250ml D5W 2 Dopamine 225mg @ 5mcg/hr
1755	✓	✓	✓						3ml 4.2% NaBicarb IV
1756						1.5ml			Lab drawn
1800									Lifeflight personnel here
802	✓	✓	✓				4ml		Continuous CPR
807	✓	✓	✓			1.5ml			
813					30 Joules				
814							3ml		IV followed & flush
Time Code Stopped: 1826		Patient Survived: Yes <input checked="" type="radio"/> No <input type="radio"/>		Transferred To: [REDACTED]		Time: [REDACTED]			
Organ Donation: Yes <input checked="" type="radio"/> No <input type="radio"/>		Family Notified: <input checked="" type="radio"/> Yes <input type="radio"/> No <input type="radio"/>		Time: [REDACTED]		Pastoral Care Notified: Yes <input type="radio"/> No <input checked="" type="radio"/> N/A			
Autopsy: Yes <input type="radio"/> No <input type="radio"/>		Physician Signature: [REDACTED]		Supervisor Signature: [REDACTED]					

ORIGINAL - PATIENT CHART

COPY - ICU

**Hospital**  
A CENTER FOR HEALTHCARE

## ER ASSESSMENT FLOW SHEET

DL                      Age 5  
Emergent ☒ Urgent ☐ Non-Emergent ☐ ID Band ☐  
Name:                     

LMP NA Tetanus                       
Allergies                       
unknown

## Regular Medications

Patient arrival time 1724 Mode of Arrival FCA Doctor                      Time called 1724 Time arrived 1724 Wt.                     

**PRESENT ON ARRIVAL:** Spineboard CID Splint L R  
Arm Leg Philly collar NA  
**BREATHING:** Normal Labored Rales Wheezing Crackles  
RUL RML BLW LUL LML LLL Apnea  
**PULSES:** Radial Brachial Apical Femoral Tibial  
Carotid NONE  
Regular Irregular Weak Thready  
**PAIN SCALE:** 1 2 3 4 5 6 7 8 9 10  
NA (least) (greatest)

**ABDOMEN:** Soft Tender Rigid Distended Bowel Sounds: P A  
**SKIN INTEGRITY:** Abrasions Lacerations Bruises Rash Bite/Sting NA  
**SPEECH:** Coherent Incoherent Silent Hysterical Slurred (Infant)  
**SKELETALMUSCULAR:** Swelling Discoloration Redness Arm Leg  
Immobilized Hand Foot R L Cold Pack NA  
**PSYCHOSOCIAL:** Accompanied Alone Able to Cope Needs Referral  
Family Notified Y N NEED TO NOTIFY Y N  
**NURSING DX:** CODE BLUE

Time	Temp.	B/P	P	R	Eyes Open	Verbal Response	Motor Response	Pupil Size R L	Pupil Reaction R L

Time 1724 Assessment MVA - 5 y.o. white male involved - CODE BLUE at scene  
pt arrived with CPR in progress - PALS protocol initiated -  
See CODE SHEET for further charting - called  
per family request

## Physician's orders:

Time	T.O. / V.O. Dr.	Initials
IV's/SL	Time	Size
1.		
2.		
Drips/IVPB's		
Medications	Dose/Route	Time
Treatment/Procedures	Time	Patient Response

DISPOSITIONS: Office Admitted STOP Expired Dismissed Transferred (place)                     

Sent by: Car FCA Life Flight Other                     

CONDITION ON DISMISSAL: POOR FAIR GOOD STABLE Time: 1826 Consult with Dr.                      NA

COBRA signed: Y N Reason for transfer                     

VALUABLES: (circle) Dentures Purse Slacks Shirt/Blouse Undergarments Shoes Billfold Keys Glasses Contacts Hearing Aid  
Jewelry (list)                      Cash (amt.)                      Other                     

Disposition of valuables: To Safe To family/friend Home With patient Police FCA/Life Flight

Signature:

**patient imprint**

**COPY - ICU**

**PRIORITY**

☐ ROUTINE ☐ PRE-OP  
☒ COLLECT STAT ☐ O.B.  
☐ PERFORM STAT ☐ 23 HR.  
☐ PERFORM TODAY ☐ OUTPATIENT

DATE COLLECTED: 1813 BY [Signature]

DATE WHEN: 1821 A.M. [Signature]

RANSOM MEMORIAL HOSPITAL

☒ ARTERIAL BLOOD GAS

TEST	RESULT
PH 7.35 - 7.45	6.53
PCO <sub>2</sub> 35 - 45 mmHg	17.3
PO <sub>2</sub> > 80 mmHg	9.7
HCO <sub>3</sub> 22-28	14.5
CO <sub>2</sub> 22-28	19.9
BASE EXCESS -3 to +3 mEq/ml.	30.8
% SAO <sub>2</sub>	0.3
100% <u>Base</u> 102	
1 ATTEMPTS	
SITE OBTAINED <u>R Fem</u>	
PHYSICIAN NOTIFIED <u>Yol</u>	

CODE BLUE ER  
 MALE 5y0  
 26 19

ARTERIAL BLOOD GAS

CHART COPY

**PRIORITY**

☐ ROUTINE ☐ PRE-OP  
☐ COLLECT STAT ☐ O.B.  
☐ PERFORM STAT ☐ 23 HR.  
☐ PERFORM TODAY ☐ OUTPATIENT

DATE COLLECTED: 1730 BY [Signature]

DATE WHEN: 1741 A.M. [Signature]

RANSOM MEMORIAL HOSPITAL

☒ ARTERIAL BLOOD GAS

TEST	RESULT
PH 7.35 - 7.45	6.97
PCO <sub>2</sub> 35 - 45 mmHg	8.9
PO <sub>2</sub> > 80 mmHg	13
HCO <sub>3</sub> 22-28	22.7
CO <sub>2</sub> 22-28	23.5
BASE EXCESS -3 to +3 mEq/ml.	14.2
% SAO <sub>2</sub>	
100% <u>Base</u> 102	
2 ATTEMPTS	
SITE OBTAINED <u>R Fem</u>	
PHYSICIAN NOTIFIED <u>[Signature]</u>	

CODE BLUE ER  
 5y10

ARTERIAL BLOOD GAS

CHART COPY

Remove adhesive strips and attach report in this area for purposes of microfilming. (If reports are not microfilmed, use Form HD-420-S on which 16 reports can be shingled.)



[REDACTED] HOSPITAL  
[REDACTED] KANSAS

---

PATIENT NAME: [REDACTED]  
DATE: [REDACTED] / 96  
MED. REC. NO.: [REDACTED]  
PHYSICIAN: [REDACTED]

---

This patient presented CODE BLUE to the E.R. He was a front seat passenger in a motor vehicle accident unrestrained. Trauma was to his side of the vehicle. EMT's found him with a heart-beat but apneic and apparently no good pulse was evident. He was bagged and CPO was initiated and he was transferred to the E.R. On arrival to the E.R. pupils were fixed and dilated. There was no response neurologically. No heart-beat was heard and there were no respiration. He was intubated with good air sounds evident bilaterally on repeated exam. His stomach was at the outset significantly dilated presumingly from oral airway and artificial respirations.

The patient had an electrical impulse that appeared to be a junctional rhythm from the beginning. Initially bradycardiac in the 40's and eventually gradually declining in rate. He was treated repeatedly with Epinephrine/ Atropine, boluses of IV fluids. Eventually, he became asystolic and defibrillation was attempted. Resuscitation efforts were not fruitful. The patient had a chest x-ray performed. Lab. studies performed and blood gases showed persistent acidosis. An X-ray of the head and spine appeared to show a severed spine.

He had obvious trauma to the neck. on gross examination.

No further resuscitative efforts were made after that point. He was not re-intubated because of the inadequacy of the airway.

d: [REDACTED] / 96  
t: [REDACTED] / 96 DS/jh

[REDACTED] M. D.

EMERGENCY ROOM NOTE

**MEMORIAL HOSPITAL  
KANSAS**

PATIENT NAME:  
ADDRESS:

KS

PHONE NO.:

AGE:

5

DATE:

/96

HOSPITAL/MR NO.:

ER

PHYSICIAN:

X-RAY NO.:

1930

**CHEST:**

Frontal view of the chest shows endotracheal tube in place. No aerated lung is identified. Marked gaseous distention of the stomach is present. Lucency noted on either side of the heart may reflect an anterior loculated pneumothorax.

IMPRESSION: 1. Non-aerated lung.  
2. Possible pneumothorax.  
3. Marked gaseous distention of the stomach.

**LATERAL CERVICAL SPINE:**

Endotracheal tube is in place. The tube appears to be posterior to the trachea probably in the esophagus. There is dislocation of the skull from the cervical spine. In addition, there is marked widening of the preodontoid space suggesting transverse ligament rupture.

IMPRESSION: Dislocation of the skull from the cervical spine. In addition, there is marked widening of the preodontoid space suggesting transverse ligament rupture.

d: /96  
t: /96

mm

M.D.

(Dr. has not proofread)

**X-RAY REPORT**

**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**CASE VEHICLE RIGHT REAR PASSENGER**



U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

## OCCUPANT ASSESSMENT FORM

Form Approved  
O.M.B. No. 2127-0021

NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number 10

2. Case Number - Stratum 9618

3. Vehicle Number 01

4. Occupant Number 03

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age 03

Code actual age at time of accident.

(00) Less than one year old (specify by month): \_\_\_\_\_

(97) 97 years and older \_\_\_\_\_

(99) Unknown

6. Occupant's Sex 1

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height 091

Code actual height to the nearest  
centimeter.

(999) Unknown

36 inches X 2.54 = 91 centimeters

8. Occupant's Weight 015

Code actual weight to the nearest  
kilogram.

(999) Unknown

32 pounds X .4536 = 14.5 kilograms

9. Occupant's Role 2

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position 23

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify): \_\_\_\_\_

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify): \_\_\_\_\_

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify): \_\_\_\_\_

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify): \_\_\_\_\_

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify): \_\_\_\_\_

(99) Unknown

11. Occupant's Posture 0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with  
another occupant or to look out a rear  
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in  
front of seat

(8) Other abnormal posture (specify): \_\_\_\_\_

(9) Unknown

*In child  
safety  
seat.*

## EJECTION/ENTRAPMENT

12. Ejection 0

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

13. Ejection Area 0

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

14. Ejection Medium 0

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_
- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_
- (9) Unknown

15. Medium Status (Immediately Prior To Impact) 0

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

16. Entrapment 0

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

17. Occupant Mobility 3

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown



## BELT SYSTEM FUNCTION

18. Manual (Active) Belt System Availability 4

- (0) None available
- (1) Belt removed/destroyed
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt available—type unknown

*Integral Belt Partially Destroyed*

- (6) Shoulder belt (lap belt destroyed/removed)
- (7) Lap belt (shoulder belt destroyed/removed)
- (8) Other belt (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

19. Manual (Active) Belt System Use 13

- (00) None used, not available, or belt removed/destroyed
- (01) Inoperative (specify): \_\_\_\_\_

- (02) Shoulder belt
- (03) Lap belt
- (04) Lap and shoulder belt
- (05) Belt used—type unknown
- (08) Other belt used (specify): \_\_\_\_\_

- (12) Shoulder belt used with child safety seat
- (13) Lap belt used with child safety seat
- (14) Lap and shoulder belt used with child safety seat
- (15) Belt used with child safety seat—type unknown
- (18) Other belt used with child safety seat (specify): \_\_\_\_\_
- (99) Unknown if belt used

20. Proper Use of Manual (Active) Belts 9

- (0) None used or not available
- (1) Belt used properly
- (2) Belt used properly with child safety seat

*Belt Used Improperly*

- (3) Shoulder belt worn under arm
- (4) Shoulder belt worn behind back or seat
- (5) Belt worn around more than one person
- (6) Lap belt worn on abdomen
- (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of manual belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

21. Manual (Active) Belt Failure Modes During Accident 1

- (0) No manual belt used or not available
- (1) No manual belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_

(8) Other manual belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

22. Manual Shoulder Belt Upper Anchorage Adjustment 1

- (0) No manual shoulder belt
- (1) No upper anchorage adjustment for manual shoulder belt

*Adjustable shoulder Belt Upper Anchorage*

- (2) In full up position
- (3) In mid position
- (4) In full down position
- (5) Position unknown
- (9) Unknown if position has adjustable upper anchorage adjustment

23. Automatic (Passive) Belt System Availability/Function 0

- (0) Not equipped/not available
- (1) 2 point automatic belts
- (2) 3 point automatic belts
- (3) Automatic belts - type unknown

*Non-functional*

- (4) Automatic belts destroyed or rendered inoperative
- (9) Unknown

24. Automatic (Passive) Belt System Use 0

- (0) Not equipped/not available/destroyed or rendered inoperative
- (1) Automatic belt in use
- (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): \_\_\_\_\_
- (3) Automatic belt use unknown
- (9) Unknown

25. Automatic (Passive) Belt System Type 0

- (0) Not equipped/not available
- (1) Non-motorized system
- (2) Motorized system
- (9) Unknown

26. Proper Use of Automatic (Passive) Belt System 0

- (0) Not equipped/not available/not used
- (1) Automatic belt used properly
- (2) Automatic belt used properly with child safety seat

*Automatic Belt Used Improperly*

- (3) Automatic shoulder belt worn under arm
- (4) Automatic shoulder belt worn behind back
- (5) Automatic belt worn around more than one person
- (6) Lap portion of automatic belt worn on abdomen
- (7) Automatic lap and shoulder belt or

automatic shoulder belt used improperly with child safety seat (specify): \_\_\_\_\_

(8) Other improper use of automatic belt system (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

27. Automatic (Passive) Belt Failure Modes During Accident 0

- (0) Not equipped/not available/not in use
- (1) No automatic belt failure(s)
- (2) Torn webbing (stretched webbing not included)
- (3) Broken buckle or latchplate
- (4) Upper anchorage separated
- (5) Other anchorage separated (specify): \_\_\_\_\_

- (6) Broken retractor
- (7) Combination of above (specify): \_\_\_\_\_

(8) Other automatic belt failure (specify): \_\_\_\_\_

(9) Unknown \_\_\_\_\_

**POLICE REPORTED RESTRAINT USE****AIR BAG SYSTEM FUNCTION**28. Police Reported Belt Use 6

- (0) None used
- (1) Police did not indicate belt use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Automatic belt
- (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 0

- (0) No air bag available
- (1) Police did not indicate air bag availability/function
- (2) Deployed
- (3) Not deployed
- (4) Unknown if deployed
- (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- [ ] Vehicle inspection
- [ ] Official injury data
- [X] Driver/occupant interview
- [ ] Other (specify):

[ ] Unknown if belt used

30. Frontal Air Bag System Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

31. Frontal Air Bag System Deployment (This Occupant Position) 0

- (0) Not equipped/not available
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

32. Other Than First Seat Frontal Air Bag Availability/Function (This Occupant Position) 0

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

(2) Air bag disconnected (specify):

- (3) Air bag not reinstalled
- (9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First Seat Frontal (This Occupant Position) 0

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

34. Are There Indications of Air Bag System Failure? (This Occupant Position) 0

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):

(9) Unknown

(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 00  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 \_\_\_\_\_  
 (03) Object carried by occupant, (specify):  
 \_\_\_\_\_  
 (04) Adaptive/assistive controls, (specify):  
 \_\_\_\_\_  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (08) Other damage source (specify):  
 \_\_\_\_\_  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 \_\_\_\_\_  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 \_\_\_\_\_  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 \_\_\_\_\_  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0  
 (0) Not air bag equipped/air bag not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

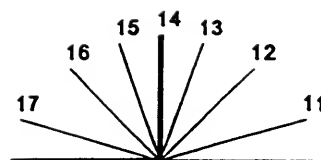
49. Head Restraint Type/Damage by Occupant at This Occupant Position 0  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
50. Seat Type (this Occupant Position) 03  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 \_\_\_\_\_  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 1  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track**  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION** *continued***53. Seat Back Incline Prior and Post Impact** 01

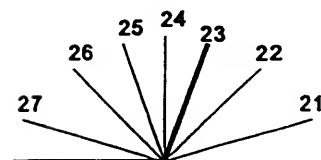
- (00) Occupant not seated or no seat  
 (01) Not adjustable

***Upright prior to impact***

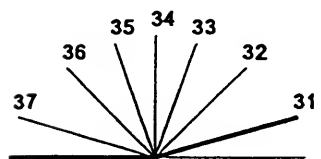
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

***Slightly reclined prior to impact***

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

***Completely reclined prior to impact***

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

**54. Seat Performance (this Occupant Position)** 1

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown



## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 3 2 2  
 (000) No child safety seat  
 Applicable codes are found in your NASS CDS  
 Data Collection, Coding and Editing  
 (950) Built-in child safety seat  
 (997) Other make/model (specify):

(998) Unknown make/model  
 (999) Unknown if child safety seat used

56. Type of Child Safety Seat 4  
 (0) No child safety seat  
 (1) Infant seat  
 (2) Toddler seat  
 (3) Convertible seat  
 (4) Booster seat - with shield  
 (5) Booster seat - without shield  
 (7) Other type child safety seat (specify):

(8) Unknown child safety seat type  
 (9) Unknown if child safety seat used

57. Child Safety Seat Orientation 1 2  
 (00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing  
 (02) Forward facing  
 (08) Other orientation (specify):

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing  
 (12) Forward facing  
 (18) Other orientation (specify):

(19) Unknown orientation

*Unknown Design or Orientation For This Age/Weight, or Unknown Age/Weight*

(21) Rear facing  
 (22) Forward facing  
 (28) Other orientation (specify):

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 1 2

59. Child Safety Seat Shield Usage 0 3

60. Child Safety Seat Tether Usage 0 3

Note: Options below applicable to  
 Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*

(01) After market harness/shield/tether  
 added, not used  
 (02) After market harness/shield/tether used  
 (03) Child safety seat used, but no after market  
 harness/shield/tether added  
 (09) Unknown if harness/shield/tether  
 added or used

*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used  
 (12) Harness/shield/tether used  
 (19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used  
 (22) Harness/shield/tether used  
 (29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES****61. Injury Severity (Police Rating)** 0

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

**62. Treatment - Mortality** 0

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

**63. Type Of Medical Facility (for Initial Treatment)** 0

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

**64. Hospital Stay** 00

(00) Not Hospitalized

Code the number of days (up through 60) that the occupant stayed in hospital.

- (61) 61 days or more
- (99) Unknown

**65. Working Days Lost** 97

Code the number of days (up through 60) that the occupant lost from work due to the accident

- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

**STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES****TRAUMA DATA**66. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death 0068. 2nd Medically Reported Cause of Death 0069. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 00

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

71. Glasgow Coma Scale (GCS) Score (at Medical Facility) 00

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood? 1

- (1) No - blood not given  
(2) Yes - blood given  
(specify units):  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 00

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 3

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used

**NASS CDS OCCUPANT ASSESSMENT FORM:**  
**VEHICLE #2 DRIVER**



## OCCUPANT ASSESSMENT FORM

1. Primary Sampling Unit Number

10

2. Case Number - Stratum

9618

3. Vehicle Number

02

4. Occupant Number

01

### OCCUPANT'S CHARACTERISTICS

5. Occupant's Age

32

Code actual age at time of accident.

(00) Less than one year old (specify by month):

(97) 97 years and older

(99) Unknown

6. Occupant's Sex

2

(1) Male

(2) Female-not reported pregnant

(3) Female-pregnant-1st trimester(1st-3rd month)

(4) Female-pregnant-2nd trimester(4th-6th month)

(5) Female-pregnant-3rd trimester(7th-9th month)

(6) Female-pregnant-term unknown

(9) Unknown

7. Occupant's Height

160

Code actual height to the nearest  
centimeter.

(999) Unknown

63 inches X 2.54 = 160 centimeters

8. Occupant's Weight

068

Code actual weight to the nearest  
kilogram.

(999) Unknown

150 pounds X .4536 = 068 kilograms

9. Occupant's Role

1

(1) Driver

(2) Passenger

(9) Unknown

### OCCUPANT'S SEATING

10. Occupant's Seat Position

11

*Front Seat*

(11) Left side

(12) Middle

(13) Right side

(14) Other (specify):

(15) On or in the lap of another occupant

*Second Seat*

(21) Left side

(22) Middle

(23) Right side

(24) Other (specify):

(25) On or in the lap of another occupant

*Third Seat*

(31) Left side

(32) Middle

(33) Right side

(34) Other (specify):

(35) On or in the lap of another occupant

*Fourth Seat*

(41) Left side

(42) Middle

(43) Right side

(44) Other (specify):

(45) On or in the lap of another occupant

(97) In or on unenclosed area

(98) Other seat (specify):

(99) Unknown

11. Occupant's Posture

0

(0) Normal posture

*Abnormal posture*

(1) Kneeling or standing on seat

(2) Lying on or across seat

(3) Kneeling, standing or sitting in front of seat

(4) Sitting sideways or turned to talk with  
another occupant or to look out a rear  
window

(5) Sitting on a console

(6) Lying back in a reclined seat position

(7) Bracing with feet or hands on a surface in  
front of seat

(8) Other abnormal posture (specify):

(9) Unknown



## EJECTION/ENTRAPMENT

## 12. Ejection

- (0) No ejection
- (1) Complete ejection
- (2) Partial ejection
- (3) Ejection, unknown degree
- (9) Unknown

0

## 13. Ejection Area

- (0) No ejection
- (1) Windshield
- (2) Left front
- (3) Right front
- (4) Left rear
- (5) Right rear
- (6) Rear
- (7) Roof
- (8) Other area (e.g., back of pickup, etc.)  
(specify): \_\_\_\_\_
- (9) Unknown

0

## 14. Ejection Medium

- (0) No ejection
- (1) Door/hatch/tailgate
- (2) Nonfixed roof structure
- (3) Fixed glazing
- (4) Nonfixed glazing (specify): \_\_\_\_\_

- (5) Integral structure
- (8) Other medium (specify): \_\_\_\_\_

- (9) Unknown

0

## 15. Medium Status (Immediately Prior To Impact)

- (0) No ejection
- (1) Open
- (2) Closed
- (3) Integral structure
- (9) Unknown

0

## 16. Entrapment

- (0) Not entrapped/exit not inhibited
- (1) Entrapped/pinned - mechanically restrained
- (2) Could not exit vehicle due to jammed doors, fire, etc.  
(specify): \_\_\_\_\_
- (9) Unknown

0

## 17. Occupant Mobility

- (0) Occupant fatal before removed from vehicle
- (1) Removed from vehicle while unconscious or not oriented to time or place
- (2) Removed from vehicle due to perceived serious injuries
- (3) Exited vehicle with some assistance
- (4) Exited vehicle under own power
- (5) Occupant fully ejected
- (8) Removed from vehicle for other reasons  
(specify): \_\_\_\_\_
- (9) Unknown

4

## BELT SYSTEM FUNCTION

<p>18. Manual (Active) Belt System Availability <u>4</u></p> <p>(0) None available (1) Belt removed/destroyed (2) Shoulder belt (3) Lap belt (4) Lap and shoulder belt (5) Belt available—type unknown</p> <p><i>Integral Belt Partially Destroyed</i> (6) Shoulder belt (lap belt destroyed/removed) (7) Lap belt (shoulder belt destroyed/removed) (8) Other belt (specify): _____</p> <p>(9) Unknown _____</p>	<p>22. Manual Shoulder Belt Upper Anchorage Adjustment <u>1</u></p> <p>(0) No manual shoulder belt (1) No upper anchorage adjustment for manual shoulder belt</p> <p><i>Adjustable Shoulder Belt Upper Anchorage</i> (2) In full up position (3) In mid position (4) In full down position (5) Position unknown (9) Unknown if position has adjustable upper anchorage adjustment</p>
<p>19. Manual (Active) Belt System Use <u>00</u></p> <p>(00) None used, not available, or belt removed/destroyed (01) Inoperative (specify): _____</p> <p>(02) Shoulder belt (03) Lap belt (04) Lap and shoulder belt (05) Belt used—type unknown (08) Other belt used (specify): _____</p> <p>(12) Shoulder belt used with child safety seat (13) Lap belt used with child safety seat (14) Lap and shoulder belt used with child safety seat (15) Belt used with child safety seat—type unknown (18) Other belt used with child safety seat (specify): _____</p> <p>(99) Unknown if belt used _____</p>	<p>23. Automatic (Passive) Belt System Availability/Function <u>0</u></p> <p>(0) Not equipped/not available (1) 2 point automatic belts (2) 3 point automatic belts (3) Automatic belts - type unknown</p> <p><i>Non-functional</i> (4) Automatic belts destroyed or rendered inoperative (9) Unknown</p> <p>24. Automatic (Passive) Belt System Use <u>0</u></p> <p>(0) Not equipped/not available/destroyed or rendered inoperative (1) Automatic belt in use (2) Automatic belt not in use (manually disconnected, motorized track inoperative) (specify): _____</p> <p>(3) Automatic belt use unknown (9) Unknown</p>
<p>20. Proper Use of Manual (Active) Belts <u>0</u></p> <p>(0) None used or not available (1) Belt used properly (2) Belt used properly with child safety seat</p> <p><i>Belt Used Improperly</i> (3) Shoulder belt worn under arm (4) Shoulder belt worn behind back or seat (5) Belt worn around more than one person (6) Lap belt worn on abdomen (7) Lap belt or lap and shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of manual belt system (specify): _____</p> <p>(9) Unknown _____</p>	<p>25. Automatic (Passive) Belt System Type <u>0</u></p> <p>(0) Not equipped/not available (1) Non-motorized system (2) Motorized system (9) Unknown</p> <p>26. Proper Use of Automatic (Passive) Belt System <u>0</u></p> <p>(0) Not equipped/not available/not used (1) Automatic belt used properly (2) Automatic belt used properly with child safety seat</p> <p><i>Automatic Belt Used Improperly</i> (3) Automatic shoulder belt worn under arm (4) Automatic shoulder belt worn behind back (5) Automatic belt worn around more than one person (6) Lap portion of automatic belt worn on abdomen (7) Automatic lap and shoulder belt or</p>
<p>21. Manual (Active) Belt Failure Modes During Accident <u>0</u></p> <p>(0) No manual belt used or not available (1) No manual belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor (7) Combination of above (specify): _____</p> <p>(8) Other manual belt failure (specify): _____</p> <p>(9) Unknown _____</p>	<p>automatic shoulder belt used improperly with child safety seat (specify): _____</p> <p>(8) Other improper use of automatic belt system (specify): _____</p> <p>(9) Unknown _____</p> <p>27. Automatic (Passive) Belt Failure Modes During Accident <u>0</u></p> <p>(0) Not equipped/not available/not in use (1) No automatic belt failure(s) (2) Torn webbing (stretched webbing not included) (3) Broken buckle or latchplate (4) Upper anchorage separated (5) Other anchorage separated (specify): _____</p> <p>(6) Broken retractor (7) Combination of above (specify): _____</p> <p>(8) Other automatic belt failure (specify): _____</p> <p>(9) Unknown _____</p>

## POLICE REPORTED RESTRAINT USE

## AIR BAG SYSTEM FUNCTION

28. Police Reported Belt Use 4

- (0) None used
- (1) Police did not indicate belt use
- (2) Shoulder belt
- (3) Lap belt
- (4) Lap and shoulder belt
- (5) Belt used, type not specified
- (6) Child safety seat
- (7) Automatic belt
- (8) Other type belt, (specify):

(9) Police indicated "unknown"

29. Police Reported Air Bag Availability/Function 0

- (0) No air bag available
- (1) Police did not indicate air bag availability/function
- (2) Deployed
- (3) Not deployed
- (4) Unknown if deployed
- (9) Police indicated "unknown"

Check the Primary Source Used In Determining Belt Use.

- ☒ Vehicle inspection
- ☐ Official injury data
- ☐ Driver/occupant interview
- ☐ Other (specify):
- ☐ Unknown if belt used

30. Frontal Air Bag System 0

Availability/Function  
(This Occupant Position)

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

31. Frontal Air Bag System Deployment 0

(This Occupant Position)

- (0) Not equipped/not available
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

32. Other Than First Seat Frontal Air Bag 0

Availability/Function

- (0) Not equipped/not available
- (1) Air bag

*Non-functional*

- (2) Air bag disconnected (specify):

(3) Air bag not reinstalled

(9) Unknown

*Specify type of "other" air bag present:*

33. Air Bag(s) Deployment, Other Than First 0

Seat Frontal (This Occupant Position)

- (0) Not equipped with an "other" air bag
- (1) Deployed during accident (as a result of impact)
- (2) Deployed inadvertently just prior to accident
- (3) Deployed, details unknown
- (4) Deployed as a result of a noncollision event during accident sequence (e.g., fire, explosion, electrical)
- (5) Unknown if deployed
- (7) Nondeployed
- (9) Unknown

34. Are There Indications of Air Bag System 0

Failure? (This Occupant Position)

- (0) Not equipped/not available
- (1) No
- (2) Yes (specify):

(9) Unknown

## FIRST SEAT FRONTAL AIR BAG SYSTEM EVALUATION

35. Had Vehicle Been in Previous Accident(s)? 0

- (0) Not equipped/not available  
(1) No previous accidents

Yes

- (2) Previous accident(s) without deployment(s)  
(3) One previous accident with deployment  
(4) More than one previous accident with at least one deployment  
(8) Previous accidents, unknown deployment status  
(9) Unknown

36. Type of Air Bag 0

- (0) Not equipped/not available  
(1) Original manufacturer installed system  
(2) Retrofitted air bag  
(3) Replacement air bag  
(8) Unknown type of air bag  
(9) Unknown

37. Had Any Prior Maintenance/Service Been Performed On This Air Bag System? 0

- (0) Not equipped/not available  
(1) No prior maintenance  
(2) Yes, prior maintenance (specify): \_\_\_\_\_

(9) Unknown

38. Air Bag Deployment Accident Event Sequence Number 00

- (00) Not equipped/not available  
\_\_\_\_\_ Code the accident event sequence number that initiated the air bag deployment

- (96) Deployed, unknown event  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

39. CDC For Air Bag Deployment Impact 0

- (0) Not equipped/not available  
(1) Highest delta V  
(2) Second highest delta V  
(3) Other non-coded delta V (specify): \_\_\_\_\_

- (6) Deployed, unknown event  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

40. Longitudinal Component of

Delta V For Air Bag Deployment Impact

+ 000  
- 000

(\_000) Not equipped/not available

Code the value of the delta V for the impact that initiated the air bag deployment

(\_996) Deployment, unknown longitudinal Delta V

(\_997) Not deployed

(\_998) Unknown if deployed

(\_999) Unknown

41. Did Air Bag Module Cover Flap(s) Open At Designated Tear Points? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes  
(3) Deployed, unknown if flap(s) opened at designated tear points  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

42. Were Air Bag Module Cover Flap(s) Damaged? 0

- (0) Not equipped/not available  
(1) No  
(2) Yes (specify): \_\_\_\_\_  
(3) Deployed, unknown if air bag module cover flap(s) damaged  
(7) Not deployed  
(8) Unknown if deployed  
(9) Unknown

43. Was There Damage To The Air Bag? 00

- (00) Not equipped/not available  
(01) Not damaged

Yes - Air Bag Damage

- (02) Ruptured  
(03) Cut  
(04) Torn  
(05) Holed  
(06) Burned  
(07) Abraded  
(88) Other damage (specify): \_\_\_\_\_

- (95) Damaged, details unknown  
(96) Deployed, unknown if damaged  
(97) Not deployed  
(98) Unknown if deployed  
(99) Unknown

**FIRST SEAT FRONTAL AIR BAG SYSTEM  
EVALUATION** *continued*

44. Source of Air Bag Damage 00  
 (00) Not equipped/not available  
 (01) Not damaged  
 (02) Object worn by occupant, (specify):  
 \_\_\_\_\_  
 (03) Object carried by occupant, (specify):  
 \_\_\_\_\_  
 (04) Adaptive/assistive controls, (specify):  
 \_\_\_\_\_  
 (05) Fire in vehicle  
 (06) Thermal burns  
 (07) Rescue or emergency efforts  
 (08) Other damage source (specify):  
 \_\_\_\_\_  
 (95) Damaged, unknown source  
 (96) Deployed, unknown if damaged  
 (97) Not deployed  
 (98) Unknown if deployed  
 (99) Unknown
45. Was The Air Bag Tethered? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of tether straps):  
 \_\_\_\_\_  
 (3) Deployed, unknown if tethered  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
46. Did The Air Bag Have Vent Ports? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify number of vent ports):  
 \_\_\_\_\_  
 (3) Deployed, unknown if vent ports present  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
47. Was the Air Bag in this Occupant's Position Contacted by Another Occupant? 0  
 (0) Not equipped/not available  
 (1) No  
 (2) Yes (specify):  
 \_\_\_\_\_  
 (3) Deployed, unknown if other occupant contact to air bag  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown
48. Was This Occupant Wearing Eye-wear? 0  
 (0) Not air bag equipped/air bag not available  
 (1) No  
 (2) Eyeglasses/sunglasses  
 (3) Contact lenses  
 (4) Deployed, unknown if eyewear worn  
 (7) Not deployed  
 (8) Unknown if deployed  
 (9) Unknown

**HEAD RESTRAINT AND SEAT EVALUATION**

49. Head Restraint Type/Damage by Occupant at This Occupant Position 3  
 (0) No head restraints  
 (1) Integral—no damage  
 (2) Integral—damaged during accident  
 (3) Adjustable—no damage  
 (4) Adjustable—damaged during accident  
 (5) Add-on—no damage  
 (6) Add-on—damaged during accident  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
50. Seat Type (this Occupant Position) 02  
 (00) Occupant not seated or no seat  
 (01) Bucket  
 (02) Bucket with folding back  
 (03) Bench  
 (04) Bench with separate back cushions  
 (05) Bench with folding back(s)  
 (06) Split bench with separate back cushions  
 (07) Split bench with folding back(s)  
 (08) Pedestal (i.e., column supported)  
 (09) Box mounted seat (i.e., van type)  
 (10) Other seat type (specify):  
 \_\_\_\_\_  
 (99) Unknown
51. Seat Orientation (this Occupant Position) 1  
 (0) Occupant not seated or no seat  
 (1) Forward facing seat  
 (2) Rear facing seat  
 (3) Side facing seat (inward)  
 (4) Side facing seat (outward)  
 (8) Other (specify):  
 \_\_\_\_\_  
 (9) Unknown
52. Seat Track Adjusted Position Prior To Impact 2  
 (0) Occupant not seated or no seat  
 (1) Non-adjustable seat track
- Adjustable Seat Track*  
 (2) Seat at forward most track position  
 (3) Seat between forward most and middle track positions  
 (4) Seat at middle track position  
 (5) Seat between middle and rear most track positions  
 (6) Seat at rear most track position  
 (9) Unknown

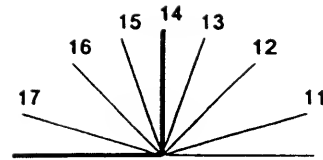


**HEAD RESTRAINT AND SEAT EVALUATION** *continued*53. Seat Back Incline Prior and Post Impact 14

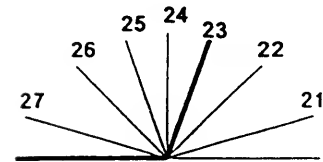
- (00) Occupant not seated or no seat  
 (01) Not adjustable

*Upright prior to impact*

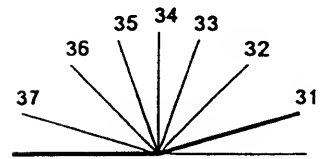
- (11) Moved to completely rearward position  
 (12) Moved to rearward midrange position  
 (13) Moved to slightly rearward position  
 (14) Retained pre-impact position  
 (15) Moved to slightly forward position  
 (16) Moved to forward midrange position  
 (17) Moved to completely forward position

*Slightly reclined prior to impact*

- (21) Moved to completely rearward position  
 (22) Moved to rearward midrange position  
 (23) Retained pre-impact position  
 (24) Moved to upright position  
 (25) Moved to slightly forward position  
 (26) Moved to forward midrange position  
 (27) Moved to completely forward position

*Completely reclined prior to impact*

- (31) Retained pre-impact position  
 (32) Moved to rearward midrange position  
 (33) Moved to slightly rearward position  
 (34) Moved to upright position  
 (35) Moved to slightly forward position  
 (36) Moved to forward midrange position  
 (37) Moved to completely forward position



(99) Unknown

54. Seat Performance (this Occupant Position) 1

- (0) Occupant not seated or no seat  
 (1) No seat performance failure(s)  
 (2) Seat adjusters failed  
 (3) Seat back folding locks or "seat back" failed (specify): \_\_\_\_\_  
 (4) Seat track/anchors failed  
 (5) Deformed by impact of occupant  
 (6) Deformed by passenger compartment intrusion, (specify): \_\_\_\_\_  
 (7) Combination of above (specify): \_\_\_\_\_  
 (8) Other (specify): \_\_\_\_\_  
 (9) Unknown

## CHILD SAFETY SEAT

55. Child Safety Seat Make/Model 0 0 0

(000) No child safety seat

Applicable codes are found in your NASS CDS  
Data Collection, Coding and Editing

(950) Built-in child safety seat

(997) Other make/model (specify):  
\_\_\_\_\_

(998) Unknown make/model

(999) Unknown if child safety seat used

56. Type of Child Safety Seat 0

(0) No child safety seat

(1) Infant seat

(2) Toddler seat

(3) Convertible seat

(4) Booster seat - with shield

(5) Booster seat - without shield

(7) Other type child safety seat (specify):  
\_\_\_\_\_

(8) Unknown child safety seat type

(9) Unknown if child safety seat used

57. Child Safety Seat Orientation 0 0

(00) No child safety seat

*Designed for Rear Facing for This Age/Weight*

(01) Rear facing

(02) Forward facing

(08) Other orientation (specify):  
\_\_\_\_\_

(09) Unknown orientation

*Designed For Forward Facing for This Age/Weight*

(11) Rear facing

(12) Forward facing

(18) Other orientation (specify):  
\_\_\_\_\_

(19) Unknown orientation

*Unknown Design or Orientation For This  
Age/Weight, or Unknown Age/Weight*

(21) Rear facing

(22) Forward facing

(28) Other orientation (specify):  
\_\_\_\_\_

(29) Unknown orientation

(99) Unknown if child safety seat used

58. Child Safety Seat Harness Usage 0 059. Child Safety Seat Shield Usage 0 060. Child Safety Seat Tether Usage 0 0Note: Options below applicable to  
Variables OA58-OA60.

(00) No child safety seat

*Not Designed With Harness/Shield/Tether*(01) After market harness/shield/tether  
added, not used

(02) After market harness/shield/tether used

(03) Child safety seat used, but no after market  
harness/shield/tether added(09) Unknown if harness/shield/tether  
added or used*Designed With Harness/Shield/Tether*

(11) Harness/shield/tether not used

(12) Harness/shield/tether used

(19) Unknown if harness/shield/tether used

*Unknown If Designed With Harness/Shield/Tether*

(21) Harness/shield/tether not used

(22) Harness/shield/tether used

(29) Unknown if harness/shield/tether used

(99) Unknown if child safety seat used

**INJURY CONSEQUENCES**61. Injury Severity (Police Rating) 2

- (0) O - No injury
- (1) C - Possible injury
- (2) B - Nonincapacitating injury
- (3) A - Incapacitating injury
- (4) K - Killed
- (5) U - Injury, severity unknown
- (6) Died prior to accident
- (9) Unknown

62. Treatment - Mortality 4

- (0) No treatment
- (1) Fatal
- (2) Fatal - ruled disease (specify):  
\_\_\_\_\_

*Nonfatal*

- (3) Hospitalization
- (4) Transported and released
- (5) Treatment at scene - nontransported
- (6) Treatment later
- (7) Treatment - other (specify):  
\_\_\_\_\_
- (8) Transported to a medical facility-unknown if treated
- (9) Unknown

63. Type Of Medical Facility (for Initial Treatment) 2

- (0) Not treated at a medical facility
- (1) Trauma center
- (2) Hospital
- (3) Medical clinic
- (4) Physician's office
- (5) Treatment later at medical facility
- (8) Other (specify):  
\_\_\_\_\_

(9) Unknown

64. Hospital Stay 00

- (00) Not Hospitalized  
\_\_\_\_\_ Code the number of days (up through 60)  
that the occupant stayed in hospital.
- (61) 61 days or more
- (99) Unknown

65. Working Days Lost 99

- \_\_\_\_\_ Code the number of days  
(up through 60) that the occupant  
lost from work due to the accident
- (00) No working days lost
- (61) 61 days or more
- (62) Fatally injured
- (97) Not working prior to accident
- (99) Unknown

*11 and counting***STOP WORK HERE****VARIABLES 66-74****TO BE CODED BY THE ZONE CENTER**

**TO BE CODED BY THE ZONE CENTER****INJURY CONSEQUENCES**66. Time to Death 00

Code number of hours from time of accident to time of death up through 24 hours. If time of death is greater than 24 hours, code number of days. (Note: 1 day = 31, 2 days = 32, ... n days = 30 + n up through 30 days = 60)

- (00) Not fatal  
(96) Fatal - ruled disease  
(99) Unknown

67. 1st Medically Reported Cause of Death 0068. 2nd Medically Reported Cause of Death 0069. 3rd Medically Reported Cause of Death 00

Code the Occupant Injury from line number(s) for the medically reported injury(s) which reportedly contributed to this occupant's death

- (00) Not fatal or no additional causes  
(96) Mode of death given but specific injuries are not linked to cause of death. (specify):

(97) Other result (includes fatal ruled disease) (specify):

(99) Unknown

70. Number of Recorded Injuries for This Occupant 06

Code the actual number of injuries recorded for this occupant.

- (00) No recorded injuries  
(97) Injured, details unknown  
(99) Unknown if injured

**TRAUMA DATA**71. Glasgow Coma Scale (GCS) Score 02  
(at Medical Facility)

- (00) Not injured  
(01) Injured - not treated at medical facility  
(02) No GCS Score at medical facility  
(03-15) Code the actual value of the initial GCS Score recorded at medical facility.  
(97) Injured, details unknown  
(99) Unknown if injured

72. Was the Occupant Given Blood? 1

- (1) No - blood not given  
(2) Yes - blood given  
(specify units):  
(9) Unknown if blood given

73. Arterial Blood Gases (ABG) - HCO<sub>3</sub> 01

- (00) Not injured  
(01) Injured, ABGs not measured or reported  
(02-50) Code the actual value of the HCO<sub>3</sub>  
(96) ABGs reported, HCO<sub>3</sub> unknown  
(97) Injured, details unknown  
(99) Unknown if injured

**BELT USE DETERMINATION**74. Primary Source of Belt Use Determination 1

- (0) Not equipped/not available/destroyed or rendered inoperative  
(1) Vehicle inspection  
(2) Official injury data  
(3) Driver/occupant interview  
(8) Other (specify):  
(9) Unknown if belt used

**NASS CDS OCCUPANT INJURY FORM:**  
**VEHICLE #2 DRIVER**





U.S. Department of Transportation  
National Highway Traffic Safety  
Administration

# OCCUPANT INJURY FORM

Form Approved  
O.M.B. No. 2127-0021  
NATIONAL ACCIDENT SAMPLING SYSTEM  
CRASHWORTHINESS DATA SYSTEM

1. Primary Sampling Unit Number		<u>10</u>		3. Vehicle Number		<u>02</u>	
2. Case Number - Stratum		<u>9618</u>		4. Occupant Number		<u>01</u>	

INJURY DATA											
Record below the actual injuries sustained by this occupant that were identified from the official and unofficial data sources. Remember not to double count an injury just because it was identified from two different sources. If greater than ten injuries have been documented, encode the balance on the Occupant Injury Supplement.											
A.I.S. - 90											
Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/Indirect Injury	Occupant Area Intrusion Number	
Fx (L) distal radius	1st	5. <u>7</u>	6. <u>7</u>	7. <u>5</u>	8. <u>28</u>	9. <u>00</u>	10. <u>2</u>	11. <u>2</u>	12. <u>004</u>	13. <u>2</u>	14. <u>2</u> 15. <u>00</u>
Fx (L) distal ulna	2nd	16. <u>7</u>	17. <u>7</u>	18. <u>5</u>	19. <u>32</u>	20. <u>00</u>	21. <u>2</u>	22. <u>2</u>	23. <u>004</u>	24. <u>2</u>	25. <u>2</u> 26. <u>00</u>
Laceration lower lip	3rd	27. <u>7</u>	28. <u>2</u>	29. <u>9</u>	30. <u>06</u>	31. <u>00</u>	32. <u>1</u>	33. <u>8</u>	34. <u>001</u>	35. <u>2</u>	36. <u>1</u> 37. <u>00</u>
Contusion under (L) breast	4th	38. <u>7</u>	39. <u>4</u>	40. <u>9</u>	41. <u>04</u>	42. <u>02</u>	43. <u>1</u>	44. <u>2</u>	45. <u>004</u>	46. <u>2</u>	47. <u>1</u> 48. <u>00</u>
Contusion (R) forearm	5th	49. <u>7</u>	50. <u>7</u>	51. <u>9</u>	52. <u>04</u>	53. <u>02</u>	54. <u>1</u>	55. <u>1</u>	56. <u>011</u>	57. <u>3</u>	58. <u>1</u> 59. <u>00</u>
Contusion (L) knee	6th	60. <u>7</u>	61. <u>8</u>	62. <u>9</u>	63. <u>04</u>	64. <u>02</u>	65. <u>1</u>	66. <u>2</u>	67. <u>010</u>	68. <u>1</u>	69. <u>1</u> 70. <u>00</u>
7th	71. <u>  </u>	72. <u>  </u>	73. <u>  </u>	74. <u>  </u>	75. <u>  </u>	76. <u>  </u>	77. <u>  </u>	78. <u>  </u>	79. <u>  </u>	80. <u>  </u>	81. <u>  </u>
8th	82. <u>  </u>	83. <u>  </u>	84. <u>  </u>	85. <u>  </u>	86. <u>  </u>	87. <u>  </u>	88. <u>  </u>	89. <u>  </u>	90. <u>  </u>	91. <u>  </u>	92. <u>  </u>
9th	93. <u>  </u>	94. <u>  </u>	95. <u>  </u>	96. <u>  </u>	97. <u>  </u>	98. <u>  </u>	99. <u>  </u>	100. <u>  </u>	101. <u>  </u>	102. <u>  </u>	103. <u>  </u>
10th	104. <u>  </u>	105. <u>  </u>	106. <u>  </u>	107. <u>  </u>	108. <u>  </u>	109. <u>  </u>	110. <u>  </u>	111. <u>  </u>	112. <u>  </u>	113. <u>  </u>	114. <u>  </u>

## OCCUPANT INJURY DATA

A.I.S. - 90											
Source of Injury Data	Body Region	Type of Anatomic Structure	Specific Anatomic Structure	Level of Injury	A.I.S. Severity	Aspect	Injury Source	Injury Source Confidence Level	Direct/ Indirect Injury	Occupant Area Intrusion Number	
11th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
12th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
13th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
14th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
15th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
16th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
17th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
18th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
19th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
20th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
21st	—	—	—	— — —	—	—	— — — —	—	—	— — —	
22nd	—	—	—	— — —	—	—	— — — —	—	—	— — —	
23rd	—	—	—	— — —	—	—	— — — —	—	—	— — —	
24th	—	—	—	— — —	—	—	— — — —	—	—	— — —	
25th	—	—	—	— — —	—	—	— — — —	—	—	— — —	

**OCCUPANT INJURY CLASSIFICATION**

Body Region	Specific Anatomic Structure	Level of Injury	Aspect
(1) Head		Specific injuries are assigned consecutive two-digit numbers beginning with 02.	(1) Right
(2) Face			(2) Left
(3) Neck	<u>Vessels, Nerves, Organs.</u>		(3) Bilateral
(4) Thorax	<u>Bones, Joints</u> are assigned consecutive two digit numbers beginning with 02.		(4) Central
(5) Abdomen		To the extent possible, within the organizational framework of the AIS, 00 is assigned to an injury NFS as to severity or where only one injury is given in the dictionary for that anatomic structure. 99 is assigned to any injury NFS as to lesion or severity.	(5) Anterior
(6) Spine			(6) Posterior
(7) Upper Extremity			(7) Superior
(8) Lower Extremity			(8) Inferior
(9) Unspecified	The exceptions to this rule apply to:		(9) Unknown
			(0) Whole region
<b>Type of Anatomic Structure</b>	<u>Whole Area</u>		
(1) Whole Area	(02) Skin - Abrasion		
(2) Vessels	(04) Skin - Contusion		
(3) Nerves	(06) Skin - Laceration		
(4) Organs (includes Muscles/ligaments)	(08) Skin - Avulsion		
(5) Skeletal (includes joints)	(10) Amputation		
(6) Head - LOC	(20) Burn		
(9) Skin	(30) Crush		
	(40) Degloving		
	(50) Injury - NFS		
	(90) Trauma, other than mechanical		
	<u>Head - LOC</u>		
	(02) Length of LOC		
	(04) Level		
	(06) of		
	(08) Consciousness		
	(10) Concussion		
	<u>Spine</u>		
	(02) Cervical		
	(04) Thoracic		
	(06) Lumbar		
		<b>Abbreviated Injury Scale</b>	
		(1) Minor Injury	
		(2) Moderate Injury	
		(3) Serious Injury	
		(4) Severe Injury	
		(5) Critical Injury	
		(6) Maximum (untreatable)	
		(7) Injured, unknown severity	

**SOURCE OF INJURY DATA****INJURY SOURCE****DIRECT/INDIRECT INJURY****CONFIDENCE LEVEL****OFFICIAL RECORDS**

- (1) Autopsy records with or without hospital/medical records
- (2) Hospital/medical records other than emergency room (e.g., discharge summary)
- (3) Emergency room records only (including associated X-rays or other lab reports)
- (4) Private physician, walk-in or emergency clinic

**UNOFFICIAL RECORDS**

- (5) Lay coroner report
- (6) E.M.S. personnel
- (7) Interviewee
- (8) Other source (specify): \_\_\_\_\_
- (9) Police

- (1) Certain
- (2) Probable
- (3) Possible
- (9) Unknown

- (1) Direct contact injury
- (2) Indirect contact injury
- (3) Noncontact injury
- (7) Injured, unknown source

# OFFICIAL INJURY DATA — SOFT TISSUE INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)

Restrained?

☐ No

☐ Yes

Blood Alcohol Level  
(mg/dl)

BAL =

Glasgow Coma  
Scale Score

GCSS =

Units of Blood  
Given

Units =

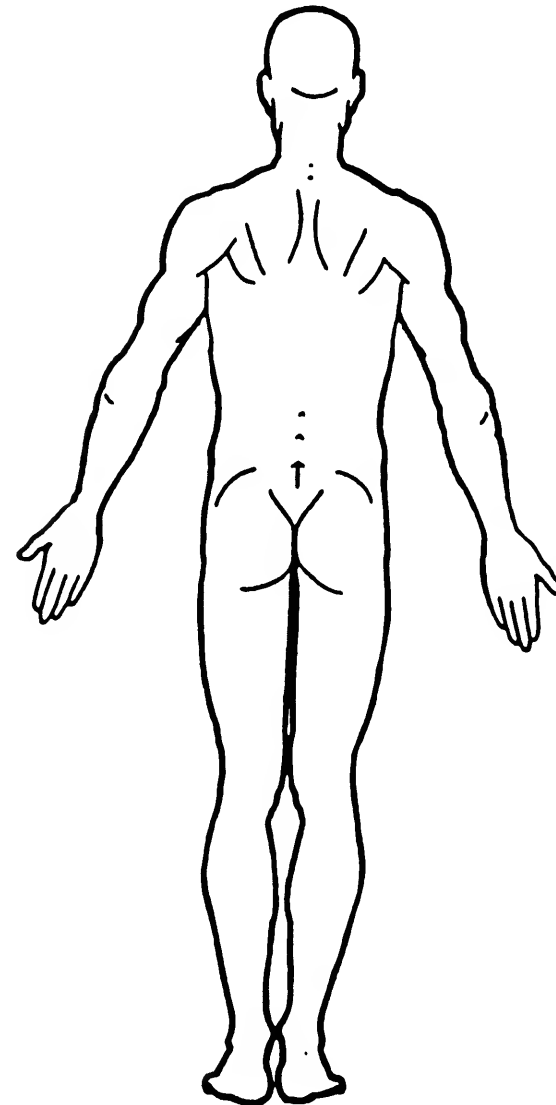
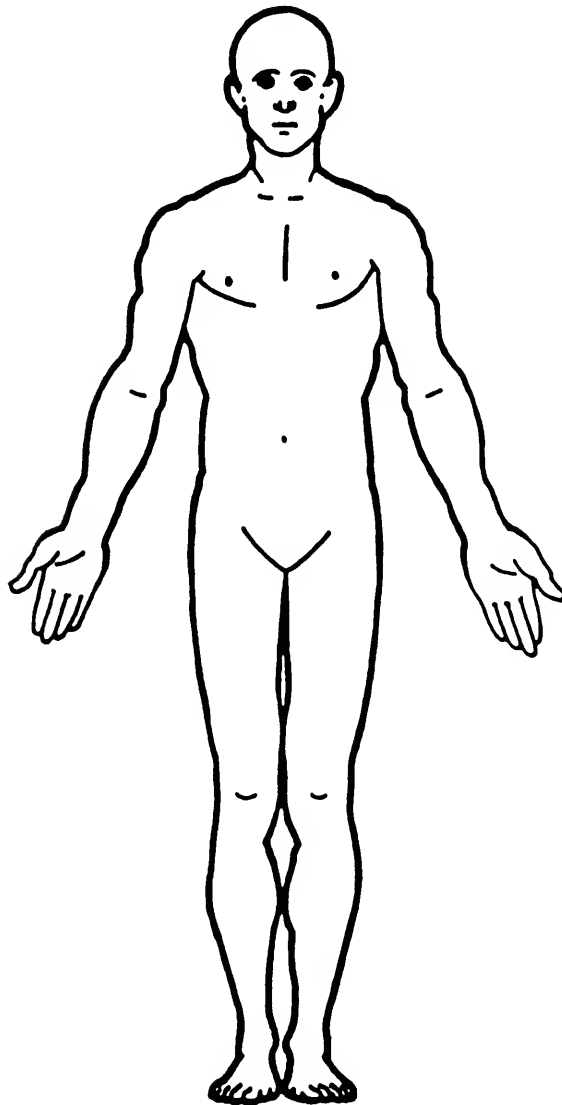
Arterial Blood Gases

pH =

PO<sub>2</sub> =

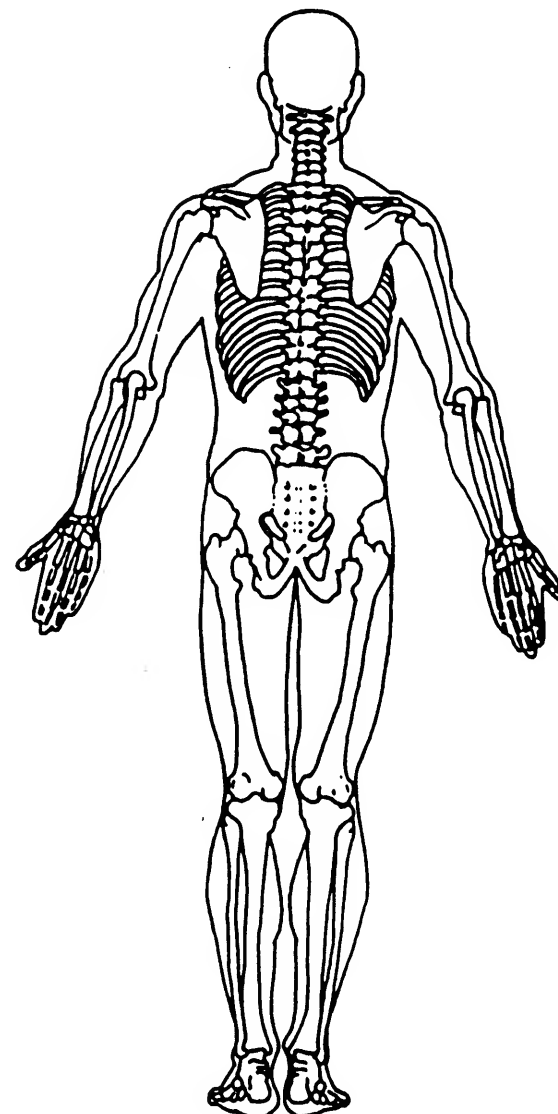
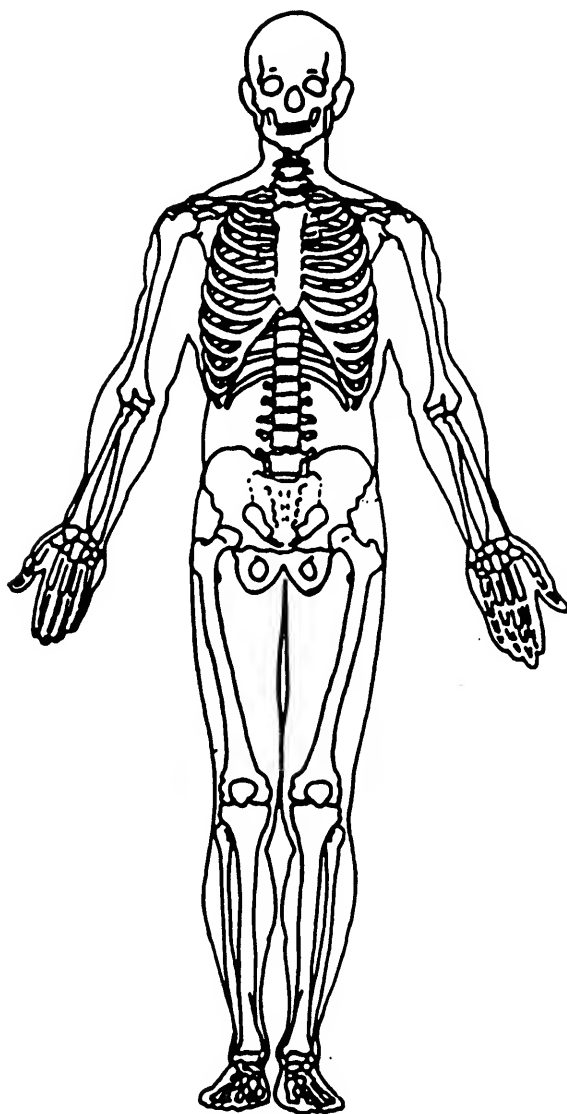
PCO<sub>2</sub>

HCO<sub>3</sub>



## OFFICIAL INJURY DATA — SKELETAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)





## INJURY SOURCES

## FRONT

- (001) Windshield
- (002) Mirror
- (003) Sunvisor
- (004) Steering wheel rim
- (005) Steering wheel hub/spoke
- (006) Steering wheel (combination of codes 004 and 005)
- (007) Steering column, transmission selector lever, other attachment
- (008) Cellular telephone or CB radio
- (009) Add on equipment (e.g., tape deck, air conditioner)
- (010) Left instrument panel and below
- (011) Center instrument panel and below
- (012) Right instrument panel and below
- (013) Glove compartment door
- (014) Knee bolster
- (015) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, mirror, or steering assembly (driver side only)
- (016) Windshield including one or more of the following: front header, A (A1/A2)-pillar, instrument panel, or mirror (passenger side only)
- (017) Windshield reinforced by exterior object (specify): \_\_\_\_\_
- (019) Other front object (specify): \_\_\_\_\_

## LEFT SIDE

- (051) Left side interior surface, excluding hardware or armrests
- (052) Left side hardware or armrest
- (053) Left A (A1/A2)-pillar
- (054) Left B-pillar
- (056) Other left pillar (specify): \_\_\_\_\_
- (056) Left side window glass
- (057) Left side window frame
- (058) Left side window sill
- (059) Left side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (060) Other left side object (specify): \_\_\_\_\_

## RIGHT SIDE

- (101) Right side interior surface, excluding hardware or armrests

- (102) Right side hardware or armrest
- (103) Right A (A1/A2)-pillar
- (104) Right B-pillar
- (105) Other right pillar (specify): \_\_\_\_\_
- (106) Right side window glass
- (107) Right side window frame
- (108) Right side window sill
- (109) Right side window glass including one or more of the following: frame, window sill, A (A1/A2)-pillar, B-pillar, or roof side rail.
- (110) Other right side object (specify): \_\_\_\_\_

## INTERIOR

- (151) Seat, back support
- (152) Belt restraint webbing/buckle
- (153) Belt restraint B-pillar or door frame attachment point
- (154) Other restraint system component (specify): \_\_\_\_\_
- (155) Head restraint system
- (160) Other occupants (specify): \_\_\_\_\_
- (161) Interior loose objects
- (162) Child safety seat (specify): \_\_\_\_\_
- (163) Other interior object (specify): \_\_\_\_\_

## AIR BAG

- (170) Air bag-driver side
- (171) Air bag-driver side and eyewear
- (172) Air bag-driver side and jewelry
- (173) Air bag-driver side and object held
- (174) Air bag-driver side and object in mouth
- (175) Air bag compartment cover-driver side
- (176) Air bag compartment cover-driver side and eyewear
- (177) Air bag compartment cover-driver side and jewelry
- (178) Air bag compartment cover-driver side and object held
- (179) Air bag compartment cover-driver side and object in mouth
- (180) Air bag-passenger side
- (181) Air bag-passenger side and eyewear
- (182) Air bag-passenger side and jewelry

- (183) Air bag-passenger side and object held
- (184) Air bag-passenger side and object in mouth
- (185) Air bag compartment cover-passenger side
- (186) Air bag compartment cover-passenger side and eyewear
- (187) Air bag compartment cover-passenger side and jewelry
- (188) Air bag compartment cover-passenger side and object held
- (189) Air bag compartment cover-passenger side and object in mouth
- (190) Other air bag (specify): \_\_\_\_\_
- (195) Other air bag compartment cover (specify): \_\_\_\_\_

## ROOF

- (201) Front header
- (202) Rear header
- (203) Roof left side rail
- (204) Roof right side rail
- (205) Roof or convertible top

## FLOOR

- (251) Floor (including toe panel)
- (252) Floor or console mounted transmission lever, including console
- (253) Parking brake handle
- (254) Foot controls including parking brake

## REAR

- (301) Backlight (rear window)
- (302) Backlight storage rack, door, etc.
- (303) Other rear object (specify): \_\_\_\_\_

## ADAPTIVE (ASSISTIVE) DRIVING EQUIPMENT

- (401) Hand controls for braking/acceleration
- (402) Steering control devices (attached to OEM steering wheel)
- (403) Steering knob attached to steering wheel
- (405) Replacement steering wheel (i.e., reduced diameter)
- (406) Joy stick steering controls
- (407) Wheelchair tie-downs
- (408) Modification to seat belts, (specify): \_\_\_\_\_
- (409) Additional or relocated switches, (specify): \_\_\_\_\_

- (410) Raised roof

- (411) Wall mounted head rest (used behind wheel chair)
- (412) Other adaptive device (specify): \_\_\_\_\_

## EXTERIOR OF OCCUPANT'S VEHICLE

- (451) Hood
- (452) Outside hardware (e.g., outside mirror, antenna)
- (453) Other exterior surface or tires (specify): \_\_\_\_\_
- (454) Unknown exterior objects

## EXTERIOR OF OTHER MOTOR VEHICLE

- (501) Front bumper
- (502) Hood edge
- (503) Other front of vehicle (specify): \_\_\_\_\_
- (504) Hood
- (505) Hood ornament
- (506) Windshield, roof rail, A-pillar
- (507) Side surface
- (508) Side mirrors
- (509) Other side protrusions (specify): \_\_\_\_\_
- (510) Rear surface
- (511) Undercarriage
- (512) Tires and wheels
- (513) Other exterior of other motor vehicle (specify): \_\_\_\_\_
- (514) Unknown exterior of other motor vehicle

## OTHER VEHICLE OR OBJECT IN THE ENVIRONMENT

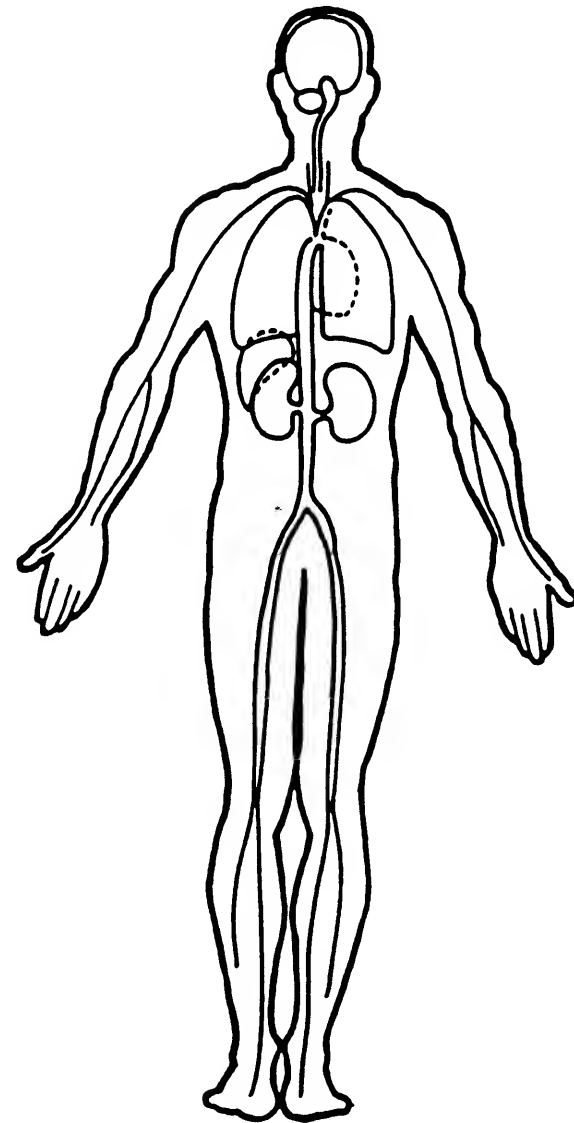
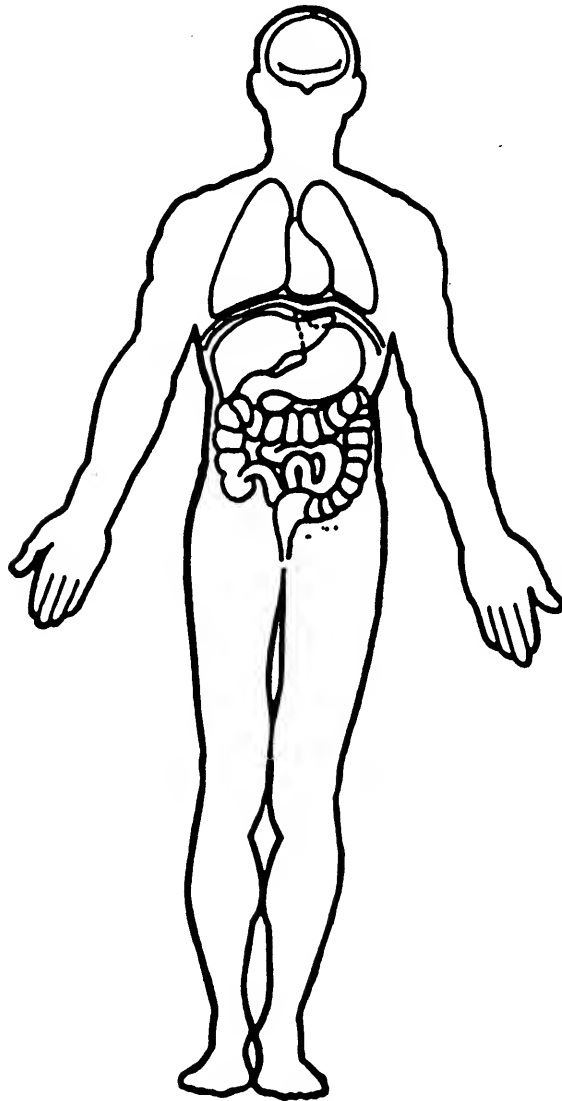
- (551) Ground
- (598) Other vehicle or object (specify): \_\_\_\_\_
- (599) Unknown vehicle or object

## NONCONTACT INJURY

- (601) Fire in vehicle
- (602) Flying glass
- (603) Other noncontact injury source (specify): \_\_\_\_\_
- (604) Air bag exhaust gases
- (697) Injured, unknown source

## OFFICIAL INJURY DATA —INTERNAL INJURIES

Indicate the Location, Specific Anatomic Structure, Detail (size, depth, fracture type, head injury clinical signs and neurological deficits), and Source of all injuries indicated by official sources (or from PAR or other unofficial sources if medical records and interviewee data are unavailable.)



## CAUSE OF DEATH

## ICD-9-CM

### OTHER DRUGS (GV16)

Specimen Test Type	Drug(s)	Drug Type
<input type="checkbox"/> Blood and urine tests <input type="checkbox"/> Blood test only <input type="checkbox"/> Urine test only <input type="checkbox"/> Other test <input type="checkbox"/> Unspecified		

### MEDICAL RECORD ABBREVIATIONS

Symbol	Record Type Description
<b>A</b>	Autopsy—medical information based upon an invasive examination of a body
<b>ME</b>	Medical examiner's record—where the information reported on the patient is based on a non-invasive examination of the body
<b>AR</b>	Admission record/summary—any medical information on this record should be considered as post-ER since it summarizes the patient's admission; these records are common in short hospitalizations and usually only contain: admission DX(s), final DX(s), and a listing of surgical treatments; ICD-9-CM codes are frequently available.
<b>FS</b>	Admission/discharge face sheet—face sheets are essentially the same as admission record/summaries and contain the same types of information as discussed above
<b>DS</b>	Discharge summary—shorten history of a patient's hospitalization highlighting the patient's major injuries; this record is often written from the perspective of its author which in many cases is a consultant
<b>OS</b>	Operative record—summary of a performed surgical operation often providing detailed information about a specific trauma; patients who survive the surgery are normally admitted; thus, this record is normally considered post-ER; however, if this record results from an outpatient surgery, then treat it as emergency-room related
<b>FX</b>	Radiographic records—taken after the patient has been admitted, or while in surgery or intensive care
<b>PN</b>	Patient progress notes—supplemental record containing additional nurses notes taken after the patient's admission
<b>HP</b>	History and physical exam—medical history and the results of the physical exam obtained by the emergency room physician assigned to the patient upon arrival at the emergency room
<b>CN</b>	Consultation record—consultations are in essence additional history and physical exams performed by doctors whose expertise was requested by the emergency room physician; the consultation may occur during the emergency room visit or after admission
<b>ER</b>	Emergency room report—where the author of this information is undefined
<b>EN</b>	Emergency room nurse—"nurse/complaint of" section on the emergency room report
<b>ED</b>	Emergency room doctor—"objective/physical exam" section plus "diagnosis and treatment" sections (i.e., doctor portion of emergency room report)
<b>NN</b>	Nurse notes—supplemental record containing additional notes taken by the emergency room nurse(s)
<b>EX</b>	Radiographic records—taken during the patients stay in the emergency room
<b>CV</b>	Coroner's verdict—statement of cause of death for legal specific regarding injuries; care must be exercised to ascertain the credentials of the verdict's author.
<b>CR</b>	Coroner's report—medical information based upon a noninvasive examination performed by a person who is not a doctor but who has the title of a coroner
<b>ET</b>	Emergency medical technician—report by a person who qualifies as an emergency medical services technician (EMS or EMT)
<b>O</b>	Other source—medical information based on an other source (e.g., newspaper, DVM—Doctor of Veterinary Medicine)

## REPORT

To Be Completed for All Child Deaths (Age 0-17 Years)

For SCDRB Use Only

No. \_\_\_\_\_

## A. IDENTIFICATION OF THE VICTIM

1. NAME (LAST, FIRST, MI)		2. BIRTH DATE (MO/DAY/YR)	3. DEATH DATE (MO/DAY/YR) AND TIME (MILITARY)
COUNTY OF RESIDENCE		5. COUNTY OF INJURY/ILLNESS	6. COUNTY OF DEATH
7. SEX AND RACE/ETHNICITY			

## B. MANNER OF DEATH

Note: If death due to natural cause, answer only Sections B, E (if other circumstances apply) and G on page 2.

<input type="checkbox"/> 8. Natural (except SIDS) Specify:	<input type="checkbox"/> 9. SIDS	<input type="checkbox"/> 10. Accident	<input type="checkbox"/> 11. Suicide	<input type="checkbox"/> 12. Homicide	<input type="checkbox"/> 13. Pending Investigation	<input type="checkbox"/> 14. Undetermined
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## C. SOCIAL INFORMATION

Mark all that apply:

## 15. Persons living in residence of victim:

- a. ☐ Natural Father      e. ☒ Natural Mother  
b. ☐ Adoptive Father      f. ☐ Adoptive Mother  
c. ☐ Step Father      g. ☐ Step Mother  
d. ☐ Foster Father      h. ☐ Foster Mother  
i. ☒ Minor(s) living in residence  
j. ☐ Parent's male paramour  
k. ☐ Parent's female paramour  
l. ☐ Other: \_\_\_\_\_  
m. ☐ Unknown

16. Children including victim under 18 years living in residence: # 2

## 17. Children living in residence - age (use: "&lt;1" if less than one year):

- a. 2 yrs c. \_\_\_\_\_ yrs e. \_\_\_\_\_ yrs  
b. \_\_\_\_\_ yrs d. \_\_\_\_\_ yrs f. \_\_\_\_\_ yrs

## 18. Persons in charge of victim at time of fatal illness or injury event:

- a. ☐ Natural Father      e. ☒ Natural Mother  
b. ☐ Adoptive Father      f. ☐ Adoptive Mother  
c. ☐ Step Father      g. ☐ Step Mother  
d. ☐ Foster Father      h. ☐ Foster Mother  
i. ☐ Child(ren)  
j. ☐ Parent's male paramour  
k. ☐ Parent's female paramour  
l. ☐ No one in charge  
m. ☐ Other: \_\_\_\_\_  
n. ☐ Unknown

19. If child(ren) in charge - ages: a. ☐ N/A  
b. \_\_\_\_\_ yrs c. \_\_\_\_\_ yrs d. \_\_\_\_\_ yrs

## 20. Were one or more persons in charge intoxicated or under influence of drugs at time of fatal illness/injury event?

- a. ☐ Yes b. ☒ No c. ☐ Unknown

## 21. Who had legal custody of the victim at the time of the fatal illness/injury?

- a. ☒ Natural Father      e. ☒ Natural Mother  
b. ☐ Adoptive Father      f. ☐ Adoptive Mother  
c. ☐ Step Father      g. ☐ Step Mother  
d. ☐ Foster Father      h. ☐ Foster Mother  
i. ☐ Other (specify): \_\_\_\_\_

## 22. If two persons are described as having legal custody, they are:

- a. ☒ Currently married  
b. ☐ Never married      d. ☐ Separated  
c. ☐ Divorced      e. ☐ Unknown

23. Have there been any other child fatalities associated with any of the above? a. ☐ Unknown

- b. ☐ Yes c. ☒ No If yes, explain:

## D. LOCATION AND WITNESSES

Mark all that apply:

## 24. Scene of illness or injury event:

- a. ☐ Highway      f. ☐ Public driveway  
b. ☐ City street      g. ☐ Private driveway  
c. ☒ Rural road      h. ☐ Other private prop.  
d. ☐ Farm      i. ☐ Resid. of victim  
e. ☐ Body of water      j. ☐ Other residence  
k. ☐ Other: \_\_\_\_\_  
l. ☐ Unknown

If illness, skip to Section E.

## 25. Date of injury event (mo/day/yr):

9/6

## 26. Time of injury event:

- a. \_\_\_\_\_ a.m. ☐ p.m.  
b. Between \_\_\_\_\_ and \_\_\_\_\_  
c. ☒ Unknown

## 27. Did anyone (other than person(s) who inflicted the injury) witness the injury event?

- a. ☒ Yes b. ☐ No c. ☐ Unknown

If YES, skip to #30 below.

## 28. How much time elapsed from the time the victim was last seen until the time of the incident?

- a. ☐ Known \_\_\_\_\_ hrs. \_\_\_\_\_ mins.  
b. ☐ Unknown c. ☐ N/A

## 29. Was the person in charge of child's care at the time of the injury event asleep at the time?

- a. ☐ Yes b. ☐ No c. ☐ Unknown  
d. ☐ N/A

## 30. Provide information about person(s) who witnessed the injury event (other than person(s) who inflicted the injury).

- | Witness                                   | Sex | Age | Person In Charge of Victim? |   |
|---|-----|-----|-----------------------------|---|
| a. <input checked="" type="checkbox"/> #1 | M   | F   | 28                          | <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |
| Name/phone #: _____                       |     |     |                             |   |

- |                                |   |   |   |   |
|--------------------------------|---|---|---|---|
| b. <input type="checkbox"/> #2 | M | F | 3 | <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No |
| Name/phone #: _____            |   |   |   |   |

- |                                |   |   |  |  |
|--------------------------------|---|---|--|--|
| c. <input type="checkbox"/> #3 | M | F |  | <input type="checkbox"/> Yes <input type="checkbox"/> No |
| Name/phone #: _____            |   |   |  |  |

## 31. Approximate distance between victim and person in charge of the victim at time of fatal injury event:

- 3 (Number of)  
a. ☒ Feet      d. ☐ Miles  
b. ☐ Blocks      e. ☐ Not applicable  
c. ☐ Yards      f. ☐ Unknown

## DIRECTIONS

Coroner: Within 30 days of date of death complete form to the best of your ability and file original along with a copy of autopsy report and Report of Death form with the State Child Death Review Board. Send to:

## Coroner Protocol

1. Take report of child death (ages 0-17) from law enforcement personnel, health care provider or other person having knowledge of the death.
2. Record facts of the death including time, place, manner and circumstances of death.
3. Determine necessity for autopsy and/or further investigation.
4. If an autopsy is needed, it is performed by a certified pathologist. A copy of the autopsy report including microscopic examination and toxicology results are sent to the State Child Death Review Board.
5. Call the State Child Death Review Board Chairperson, Nancy Lindberg, within 24 hours if investigation and/or autopsy determines that the death involved suspicious (i.e., non-natural) circumstances or unknown cause.
6. Notify appropriate local investigative agencies (police, SRS, etc.) as indicated for further investigation and appropriate action.
7. Complete Form 1 within one month on all child deaths (ages 0-17). Use local investigative agencies (police, SRS, etc.) when necessary to gather detailed information to complete form.
8. Send completed Form 1 to the Chairperson of the State Child Death Review Board.
9. Participate in local child death review activities if such activities are available.
10. Whenever indicated, provide comments and/or suggestions to State Child Death Review Board regarding the child death review process.

## F. BRIEF DESCRIPTION OF CIRCUMSTANCES AND OTHER COMMENTS: Note: Complete this section on a check Report of Death form.

## 2. ELIMINARY CAUSE AND CIRCUMSTANCES OF THE DEATH

Use all applicable cause categories and specific circumstances to describe the fatality, based on information presently available. More than one cause may be coded.

## 3. DEATH DUE TO NEGLIGENCE

- Cause of Death:
- ☐ Malnutrition/dehydration
  - ☐ Delayed medical care
  - ☐ Known illness: \_\_\_\_\_
  - ☐ Other: \_\_\_\_\_
  - ☐ Unknown

## 4. VEHICULAR INJURY

- Status of victim:
- 1. ☒ Occup. of vehicle
  - 2. ☐ Driver of vehicle
  - 3. ☐ Pedestrian
  - 4. ☐ Other
- Type of vehicle:
- 1. ☒ Car
  - 2. ☐ Farm tractor
  - 3. ☐ All-terrain vehicle
  - 4. ☐ Bicycle
  - 5. ☐ Bus/truck
  - 6. ☐ Pick-up/Van
  - 7. ☐ Other farm vehicle
  - 8. ☐ Riding mower
  - 9. ☐ Motorcycle
  - 10. ☐ Other: \_\_\_\_\_
- Road condition:
- 1. ☒ Normal
  - 2. ☐ Wet
  - 3. ☐ Loose gravel
  - 4. ☐ Ice/snow
  - 5. ☐ Other: \_\_\_\_\_
  - 6. ☐ Not applicable

## 5. Safety restraint (seat belt, infant seat, etc.):

- 1. ☒ Used
- 2. ☐ None in vehicle
- 3. ☒ Not used
- 4. ☐ Unknown
- 5. ☐ Not applicable

## 6. Deceased was wearing helmet:

- 1. ☐ Yes
- 2. ☒ No
- 3. ☐ Not applicable

## 7. Operator of occupant vehicle:

- 1. ☐ DUI
- 2. ☒ BAT *pending*
- 3. ☐ Drug screen

- 4. ☐ Speed/recklessness: (est. speed \_\_\_\_\_ mph) (speed limit \_\_\_\_\_ mph)
- 5. ☐ Other violation
- 6. ☐ Brake failure
- 7. ☐ No operator
- 8. ☐ Other mechanical failure
- 9. ☐ Other: \_\_\_\_\_

10. ☐ None of the above

## 8. Operator of non-occupant vehicle:

- 1. ☐ DUI
- 2. ☒ BAT *pending*
- 3. ☐ Drug screen
- 4. ☐ Speed/recklessness: (est. speed \_\_\_\_\_ mph) (speed limit \_\_\_\_\_ mph)
- 5. ☐ Assault with vehicle
- 6. ☐ Other violation
- 7. ☐ Brake failure
- 8. ☐ No operator
- 9. ☐ Other mechanical failure
- 10. ☐ Other: \_\_\_\_\_

11. ☐ None of the above

## 9. CIRCUMSTANCES UNKNOWN

- 1. ☐ DUI
- 2. ☒ BAT *pending*
- 3. ☐ Drug screen
- 4. ☐ Speed/recklessness: (est. speed \_\_\_\_\_ mph) (speed limit \_\_\_\_\_ mph)
- 5. ☐ Assault with vehicle
- 6. ☐ Other violation
- 7. ☐ Brake failure
- 8. ☐ No operator
- 9. ☐ Other mechanical failure
- 10. ☐ Other: \_\_\_\_\_
- 11. ☐ None of the above

## 10. CIRCUMSTANCES UNKNOWN

## 11. CIRCUMSTANCES UNKNOWN

## 12. DROWNING

- A. Place of drowning:
- 1. ☐ Swimming pool
  - 2. ☐ Wading pool
  - 3. ☐ Bathub
  - 4. ☐ Bucket
  - 5. ☐ Creek/river/pond/lake
  - 6. ☐ Well/cistern/septic tank
  - 7. ☐ Other: \_\_\_\_\_

## B. Location prior to drowning:

- 1. ☐ Boat
- 2. ☐ Water edge
- 3. ☐ Other: \_\_\_\_\_

## C. Wearing flotation device:

- 1. ☐ Yes
- 2. ☐ No
- 3. ☐ Unknown

## D. CIRCUMSTANCES UNKNOWN

## 13. POISONING OR OVERDOSE

## A. Name of drug or chemical:

- 1. ☐ CIRCUMSTANCES UNKNOWN

## B. CIRCUMSTANCES UNKNOWN

## C. CIRCUMSTANCES UNKNOWN

## D. CIRCUMSTANCES UNKNOWN

## E. CIRCUMSTANCES UNKNOWN

## F. CIRCUMSTANCES UNKNOWN

## G. CIRCUMSTANCES UNKNOWN

## H. CIRCUMSTANCES UNKNOWN

## I. CIRCUMSTANCES UNKNOWN

## J. CIRCUMSTANCES UNKNOWN

## K. CIRCUMSTANCES UNKNOWN

## L. CIRCUMSTANCES UNKNOWN

## M. CIRCUMSTANCES UNKNOWN

## N. CIRCUMSTANCES UNKNOWN

## O. CIRCUMSTANCES UNKNOWN

## P. CIRCUMSTANCES UNKNOWN

## Q. CIRCUMSTANCES UNKNOWN

## R. CIRCUMSTANCES UNKNOWN

## S. CIRCUMSTANCES UNKNOWN

## T. CIRCUMSTANCES UNKNOWN

## U. CIRCUMSTANCES UNKNOWN

## V. CIRCUMSTANCES UNKNOWN

## W. CIRCUMSTANCES UNKNOWN

## X. CIRCUMSTANCES UNKNOWN

## Y. CIRCUMSTANCES UNKNOWN

## Z. CIRCUMSTANCES UNKNOWN

## AA. CIRCUMSTANCES UNKNOWN

## AB. CIRCUMSTANCES UNKNOWN

## AC. CIRCUMSTANCES UNKNOWN

## AD. CIRCUMSTANCES UNKNOWN

## AE. CIRCUMSTANCES UNKNOWN

## AF. CIRCUMSTANCES UNKNOWN

## AG. CIRCUMSTANCES UNKNOWN

## AH. CIRCUMSTANCES UNKNOWN

## AI. CIRCUMSTANCES UNKNOWN

## AJ. CIRCUMSTANCES UNKNOWN

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## AL. CIRCUMSTANCES UNKNOWN

## AM. CIRCUMSTANCES UNKNOWN

## AN. CIRCUMSTANCES UNKNOWN

## AO. CIRCUMSTANCES UNKNOWN

## AP. CIRCUMSTANCES UNKNOWN

## AQ. CIRCUMSTANCES UNKNOWN

## AR. CIRCUMSTANCES UNKNOWN

## AS. CIRCUMSTANCES UNKNOWN

## AT. CIRCUMSTANCES UNKNOWN

## AU. CIRCUMSTANCES UNKNOWN

## AV. CIRCUMSTANCES UNKNOWN

## AW. CIRCUMSTANCES UNKNOWN

## AX. CIRCUMSTANCES UNKNOWN

## AY. CIRCUMSTANCES UNKNOWN

## AZ. CIRCUMSTANCES UNKNOWN

## BA. CIRCUMSTANCES UNKNOWN

## BB. CIRCUMSTANCES UNKNOWN

## BC. CIRCUMSTANCES UNKNOWN

## BD. CIRCUMSTANCES UNKNOWN

## BE. CIRCUMSTANCES UNKNOWN

## BF. CIRCUMSTANCES UNKNOWN

## BG. CIRCUMSTANCES UNKNOWN

## BH. CIRCUMSTANCES UNKNOWN

## BI. CIRCUMSTANCES UNKNOWN

## BJ. CIRCUMSTANCES UNKNOWN

## BK. CIRCUMSTANCES UNKNOWN

## BL. CIRCUMSTANCES UNKNOWN

## BM. CIRCUMSTANCES UNKNOWN

## BN. CIRCUMSTANCES UNKNOWN

## BO. CIRCUMSTANCES UNKNOWN

## BP. CIRCUMSTANCES UNKNOWN

## BQ. CIRCUMSTANCES UNKNOWN

## BR. CIRCUMSTANCES UNKNOWN

## BS. CIRCUMSTANCES UNKNOWN

## BT. CIRCUMSTANCES UNKNOWN

## BU. CIRCUMSTANCES UNKNOWN

## BV. CIRCUMSTANCES UNKNOWN

## BW. CIRCUMSTANCES UNKNOWN

## BX. CIRCUMSTANCES UNKNOWN

## BY. CIRCUMSTANCES UNKNOWN

## BZ. CIRCUMSTANCES UNKNOWN

## CA. CIRCUMSTANCES UNKNOWN

## CB. CIRCUMSTANCES UNKNOWN

## CC. CIRCUMSTANCES UNKNOWN

## CD. CIRCUMSTANCES UNKNOWN

## CE. CIRCUMSTANCES UNKNOWN

## CF. CIRCUMSTANCES UNKNOWN

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## CH. CIRCUMSTANCES UNKNOWN

## CI. CIRCUMSTANCES UNKNOWN

## CJ. CIRCUMSTANCES UNKNOWN

## CK. CIRCUMSTANCES UNKNOWN

## CL. CIRCUMSTANCES UNKNOWN

## CM. CIRCUMSTANCES UNKNOWN

## CN. CIRCUMSTANCES UNKNOWN

## CO. CIRCUMSTANCES UNKNOWN

## CP. CIRCUMSTANCES UNKNOWN

## CQ. CIRCUMSTANCES UNKNOWN

## CR. CIRCUMSTANCES UNKNOWN

## CS. CIRCUMSTANCES UNKNOWN

## CT. CIRCUMSTANCES UNKNOWN

## CU. CIRCUMSTANCES UNKNOWN

## CV. CIRCUMSTANCES UNKNOWN

## CW. CIRCUMSTANCES UNKNOWN

## CX. CIRCUMSTANCES UNKNOWN

## CY. CIRCUMSTANCES UNKNOWN

## CZ. CIRCUMSTANCES UNKNOWN

## DA. CIRCUMSTANCES UNKNOWN

## DB. CIRCUMSTANCES UNKNOWN

## DC. CIRCUMSTANCES UNKNOWN

## DD. CIRCUMSTANCES UNKNOWN

## DE. CIRCUMSTANCES UNKNOWN

## DF. CIRCUMSTANCES UNKNOWN

## DG. CIRCUMSTANCES UNKNOWN

## DH. CIRCUMSTANCES UNKNOWN

## DI. CIRCUMSTANCES UNKNOWN

## DJ. CIRCUMSTANCES UNKNOWN

## DK. CIRCUMSTANCES UNKNOWN

## DL. CIRCUMSTANCES UNKNOWN

## DM. CIRCUMSTANCES UNKNOWN

## DN. CIRCUMSTANCES UNKNOWN

## DO. CIRCUMSTANCES UNKNOWN

## DP. CIRCUMSTANCES UNKNOWN

## DQ. CIRCUMSTANCES UNKNOWN

## DR. CIRCUMSTANCES UNKNOWN

## DS. CIRCUMSTANCES UNKNOWN

## DT. CIRCUMSTANCES UNKNOWN

## DU. CIRCUMSTANCES UNKNOWN

## DV. CIRCUMSTANCES UNKNOWN

## DW. CIRCUMSTANCES UNKNOWN

## DX. CIRCUMSTANCES UNKNOWN

## DY. CIRCUMSTANCES UNKNOWN

## DZ. CIRCUMSTANCES UNKNOWN

## EA. CIRCUMSTANCES UNKNOWN

## EB. CIRCUMSTANCES UNKNOWN

## EC. CIRCUMSTANCES UNKNOWN

## ED. CIRCUMSTANCES UNKNOWN

## EE. CIRCUMSTANCES UNKNOWN

## EF. CIRCUMSTANCES UNKNOWN

## EG. CIRCUMSTANCES UNKNOWN

## EH. CIRCUMSTANCES UNKNOWN

## EI. CIRCUMSTANCES UNKNOWN

## EJ. CIRCUMSTANCES UNKNOWN

## EK. CIRCUMSTANCES UNKNOWN

## EL. CIRCUMSTANCES UNKNOWN

## EM. CIRCUMSTANCES UNKNOWN

## EN. CIRCUMSTANCES UNKNOWN

## EO. CIRCUMSTANCES UNKNOWN

## EP. CIRCUMSTANCES UNKNOWN

## EQ. CIRCUMSTANCES UNKNOWN

## ER. CIRCUMSTANCES UNKNOWN

## ES. CIRCUMSTANCES UNKNOWN

## ET. CIRCUMSTANCES UNKNOWN

## EU. CIRCUMSTANCES UNKNOWN

## EV. CIRCUMSTANCES UNKNOWN

## EW. CIRCUMSTANCES UNKNOWN

## EX. CIRCUMSTANCES UNKNOWN

## EY. CIRCUMSTANCES UNKNOWN

## EZ. CIRCUMSTANCES UNKNOWN

## FA. CIRCUMSTANCES UNKNOWN

## FB. CIRCUMSTANCES UNKNOWN

## FC. CIRCUMSTANCES UNKNOWN

## FD. CIRCUMSTANCES UNKNOWN

## FE. CIRCUMSTANCES UNKNOWN

## FF. CIRCUMSTANCES UNKNOWN

## FG. CIRCUMSTANCES UNKNOWN

## FH. CIRCUMSTANCES UNKNOWN

## FI. CIRCUMSTANCES UNKNOWN

## FJ. CIRCUMSTANCES UNKNOWN

## FK. CIRCUMSTANCES UNKNOWN

## FL. CIRCUMSTANCES UNKNOWN

## FM. CIRCUMSTANCES UNKNOWN

## FN. CIRCUMSTANCES UNKNOWN

## FO. CIRCUMSTANCES UNKNOWN

## FP. CIRCUMSTANCES UNKNOWN

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## HZ. CIRCUMSTANCES UNKNOWN

## IA. CIRCUMSTANCES UNKNOWN